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TECHNOLOGICAL REPORTS
ON
TRADE VARIETIES OF
INDIAN COTTONS,
1936

BY

NAZIR AHMAD, M.Sc., Ph.D., F.Inst.P.,

Director, Technological Laboratory, Matunga, Bombay.

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INTRODUCTION.

ONE of the main functions of the Technological Laboratory is to undertake spinning tests on Indian cottons. Upto 1929, these tests were mostly confined to samples supplied by cotton breeders and agricultural officers of the Provincial Agricultural Departments. These samples represented either new varieties which were under trial or cottons grown in connection with such field experiments as the effect of different amounts of irrigations, different rotation of crops, different dates of sowing, etc., etc. As most of the samples tested at the Laboratory for the Agricultural Departments are in the experimental stage, the results of the tests made on them are not published for general information, but are communicated only to the departments concerned. There was, however, a general feeling that the work of the Laboratory should be made more directly useful to the trade and the industry, and it was felt that this purpose could be achieved by carrying out spinning tests on such samples of representative trade varieties as form the bulk of the Indian cotton crop. In order to meet this general desire arrangements were made with the East India Cotton Association, Ltd., Bombay, for the supply of fair average quality of different trade varieties of Indian cotton on which spinning tests could be made at the Laboratory, so that the results of these tests could be broadcast for general information. These tests were first made on the 1929-30 crop, and have since been repeated on the same varieties without a break in the past seven seasons. The samples for these tests are selected by the Standards Committee of the East India Cotton Association, who also very kindly value them and give their opinion regarding their staple, class, regularity, strength, etc., etc. The tests on these samples are made with two objects. In the first place they place in the hands of the trade and the industry reliable information regarding the waste losses and the spinning performance of the chief representative types of Indian cotton. This information is available not only to merchants and spinners in India, but also to those in the foreign countries who import a considerable fraction of the Indian cotton crop. Thus, the consumers of Indian cottons, both in India and abroad, obtain reliable information regarding the spinning quality of the different styles of Indian cottons in each season. In the second place, as these tests are made year after year on samples of fair average quality selected by an expert and authoritative body like the Standards Committee of the East India Cotton Association, the results of these tests taken over a number of years are useful in showing whether any particular variety of cotton is maintaining its quality or showing signs of improvement or deterioration. If any particular variety is found, over a number of years, to show signs of steady deterioration, which is outside the seasonal fluctuation, then it is possible to undertake an investigation into the causes of this deterioration and to adopt the necessary remedial measures. It is clear that, in the absence of any reliable data obtained under definitely known and reproducible conditions on samples of fair average quality, it would not be possible to lay down definitely whether or not any particular type is showing signs of deterioration, and such may take place in a variety

without being detected for a number of years. The following is a list of cottons supplied by the East India Cotton Association, Bombay, on which tests have been made at the Laboratory :—

Cottons received from the East India Cotton Association :—

- | | |
|--------------------|-------------------|
| 1. C. P. No. 1 | 14. Kadi-Viramgam |
| 2. Berar | 15. Westerns |
| 3. Khandesh | 16. Farm Westerns |
| 4. Nanded | 17. Kumpta |
| 5. Latur | 18. Upland |
| 6. Muttia | 19. Bijapur |
| 7. Punjab-American | 20. Bagalkote |
| 8. Broach | 21. Cambodia |
| 9. Jagadia | 22. Tinnevely |
| 10. Surat | 23. Karunganni |
| 11. Navsari | 24. A. R. Kampala |
| 12. Dholeras | 25. A. R. Busoga |
| 13. Kalagin | 26. A. R. Jinja |

At the same time as the foregoing arrangement was made with the East India Cotton Association, Ltd., Bombay, it was also arranged with the Bombay Millowners' and the Ahmedabad Millowners' Associations, that some of their mill members would kindly supply to the Laboratory samples of early arrivals of different varieties of the Indian cotton crop. The object of making these tests was to place in the hands of the industry information regarding the waste losses and the spinning performance of different trade varieties in the early part of the season in order to enable the consumers to decide which of these cottons would be suitable for their mixings. These tests were begun in 1930-31, and have been continued upto the present season. In view of the fact, however, that sometimes a mill using a particular style of cotton in one season decided not to purchase the same style in the following season, a certain amount of discontinuity has occurred in some of these varieties. However, so far as possible, efforts have been made to obtain, in each season, samples of the same varieties so that the results of tests in the successive seasons may be comparable. As regards the valuation of these samples, this was kindly done by the Grader (Major Ellis Jones), upto 1931-32, but in the following seasons the mills supplying the samples were requested to furnish their own valuation reports. The following is a list of the cottons tested at the Laboratory under this arrangement with the Bombay and Ahmedabad Millowners' Associations :—

Cottons received from the Bombay Millowners' Association :—

- | | |
|----------------------|-----------------------|
| 1. Farm Westerns | 11. Westerns |
| 2. Bailhongal | 12. Miraj |
| 3. Broach | 13. Surat |
| 4. Karunganni | 14. Navsari |
| 5. Nandyal | 15. Tiruppur Cambodia |
| 6. Northern Cambodia | 16. Hubli Kumpta |
| 7. Bengals | 17. Hubli Upland |
| 8. Khandesh | 18. Kampala (African) |
| 9. Ujjain | 19. Busoga (African) |
| 10. Moglai | 20. Jinja (African) |

Cottons received from the Ahmedabad Millowners' Association :—

- | | |
|------------|---------|
| 1. Jagadia | 3. Kadi |
| 2. Bayla | |

The plan followed in presenting the results of tests on these cottons is very nearly the same as that adopted in the Technological Reports on Standard Indian Cottons. Each technological report gives the grader's valuation report, spinning master's report, and the table of spinning test results which show the waste losses, number of yarn breakages in the ring frame, the actual counts spun, the results of thelea test and the ballistic test, actual number of turns per inch, front roller and spindle speeds, drafts employed, estimate of yarn neppiness and yarn evenness and the physical conditions of temperature and humidity prevailing in the spinning room and the yarn testing room. There is, however, this difference between these reports and those on the Standard Indian Cottons that as fibre tests were not made on these trade varieties, these reports do not contain the fibre test results, nor any attempt has been made to summarise the results in the form of 'remarks.'

The supply of these samples together with the valuation reports has not been free from a certain amount of extra work on the part of those who have very kindly co-operated with me in these tests. My best thanks are therefore due to the members of the Standards Committee of the East India Cotton Association, Bombay, and its office-bearers and to the mills supplying the samples. My thanks are also due to Major Ellis Jones for valuing some of the samples, to Mr. R. P. Richardson for supervising the spinning tests and to Mr. V. Venkataraman, for assisting me in the compilation of the test result tables.

N. A.

November 1936.

1.—C. P. No. 1¹/COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
664	C.P. No. 1 (Fine)	Wardha	1929-30.	1724	C.P. No. 1	Nagpur	1932-33.
665	C.P. No. 1 (Superfine)	Nagpur	1929-30.	2137	"	Panderkora	1933-34.
999	C.P. No. 1	Katol	1930-31.	2654	"	"	1934-35.
1336	"	Nagpur	1931-32.	3110	"	Nagpur	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-Room*.—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—Same as above but spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	C. P. No. 1.							
	1929-30 (Fine)	1929-30. (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy white.	Creamy to creamy-white; bright.	White to creamy-white; very bright.	Brightish creamy-white.	White to creamy-white.	White; bright.	White to creamy-white; brightish.	White to creamy-white.
Cleanliness ..	Fairly clean; fairly bright.	Clean.	Fairly clean.	Slightly stained; fairly clean.	Fairly clean.	Clean.	Clean.	Clean.
Feel	Slightly harsh.	Typical harsh feel of its class.	Good.	Good.	Good and softish.	Rough.	Good.	Slightly rough.
Ginning and Neppiness.	Well-ginned.	Well-ginned ..	Well-ginned ..	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	1.33 percent. unginned seeds.	0.3 per cent. unginned.	..	..	..	..	..	..
Card Sliver ..	..	..	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Card Web .. ..	..	..	Good.	Good.	Fairly even and nep-free.	Even and nep-free.	Good.	Good.
Weight of 10 flat strips.	..	..	Very light; 12.3 grams.	15.8 grams.	16.2 grams.	15.9 grams.	16.3 grams.	12.2 grams.
Remarks .. ..	..	..	Fully-pressed.	..	..	..	..	..

(b) Yarn :—

	C. P. No. 1.							
	1929-30. (Fine)	1929-30 (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Evenness	Fairly uneven.	Fairly even.	Fairly even.	Somewhat uneven.	Fairly even.	Somewhat uneven.	Somewhat uneven.	Even.
Neppiness	Very little nep.	Free of nep.	Practically free.	Practically free.	Free of nep.	Nep-free.	Free of nep.	Almost free of nep.
Slubbiness ..	Very little slub.	Free of slub.	..	Fairly slubby.	..	..	A little slubby.	..
Remarks .. ..	..	..	..	..	..	..	..	..

3. *Spinning Test Details and Results*.—See Table 1 on page 3.

1-35.	1935-30.
G. Oomra Contract March 1935	Fine M. G. Oomra Hedge Contract No. 3, March 1936 delivery.
fine.	Superfine to Extra Superfine.
te.	Creamish white.
	5/8.
	Fair.
	Regular.
	Rs. 22 on.
G. Oomra Contract March 1935 Rs. 226.	Fine M. G. Oomra Hedge Contract No. 3, March 1936 delivery Rs. 170.
ry 1935.	2nd March 1936.

TECHNOLOGICAL REPORTS

ON

COTTONS SUPPLIED BY

THE EAST INDIA COTTON ASSOCIATION LTD., BOMBAY.

These samples are of fair average quality of the representative trade varieties which form the bulk of the Indian Cotton crop. The samples are selected by the Standards Committee of the East India Cotton Association, who have also very kindly furnished the valuation reports regarding their staple length, class, regularity, strength, etc.

	1930-30 (Fine).
Contract valued under	.. Fine C.P. No. 1.
Class	.. About fine.
Colour	.. Very dull.
Staple Length	.. 5/8.
" Strength	.. Fair.
Regularity	.. Fairly regular.
Value above or below Contract rate	Rs. 2 off Fine No. 1.
Basis	.. Rs. 19 on Fine No. 3.
Date of Valuation	.. 18th January 19
Remarks	..

1.—C. P. No. 1 COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
664	C.P. No. 1 (Fine)	Wardha	1929-30.	1724	C.P. No. 1	Nagpur	1932-33.
665	C.P. No. 1 (Superfine)	Nagpur	1929-30.	2137	"	Panderkora	1933-34.
999	C.P. No. 1	Katol	1930-31.	2654	"	"	1934-35.
1336	"	Nagpur	1931-32.	3110	"	Nagpur	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-Room.*—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room.*—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—Same as above but spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	C. P. No. 1.							
	1929-30 (Fine)	1929-30. (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	Creamy white.	Creamy to creamy- white; bright.	White to creamy- white; very bright.	Brightish creamy- white.	White to creamy- white.	White; bright.	White to creamy- white; brightish.	White to creamy- white.
Cleanliness ..	Fairly clean; fairly bright.	Clean.	Fairly clean.	Slightly stained; fairly clean.	Fairly clean.	Clean.	Clean.	Clean.
Feel ..	Slightly harsh.	Typical harsh feel of its class.	Good.	Good.	Good and softish.	Rough.	Good.	Slightly rough.
Gloning and Neppiness.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds ..	1.33 percent un- ginned seeds.	0.3 per cent. unginned.	..	..	..	..	..	..
Card Sliver	..	..	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Card Web ..	..	..	Good.	Good.	Fairly even and nep- free.	Even and nep-free.	Good.	Good.
Weight of 10 flat strips.	..	..	Very light; 12.3 grams.	15.8 grams.	16.2 grams.	15.9 grams.	16.3 grams.	15.2 grams.
Remarks ..	..	..	Fully-pressed.	..	..	..	..	..

(b) Yarn :—

	C. P. No. 1.							
	1929-30. (Fine)	1929-30. (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Evenness ..	Fairly uneven.	Fairly even.	Fairly even.	Somewhat uneven.	Fairly even.	Somewhat uneven.	Somewhat uneven.	Even.
Neppiness ..	Very little nep.	Free of nep.	Practically free.	Practically free.	Free of nep.	Nep-free.	Free of nep.	Almost free of nep.
Stain- marks ..	Very little slub.	Free of slub.	..	Fairly slubby.	..	..	A little slubby.	..

3. Spinning Test Details and Results.—See Table 1 on page 3.

II. REPORT OF THE STANDARDS COMMITTEE FOR C. P. No. 1 COTTON.

C.P. No. 1.									
	1929-30 (Fine).	1929-30. (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under :	Fine C.P. No. 1.	Fine C.P. No. 1.	Fine C. P. No. 1.	F. G. M. G. No. 2.	F. M. G. Oomra Hedge Contract No. 3.	Fine M. G. Oomra (Berar) H. C. No. 3.	Fine M. G. Oomra Hedge Contract No. 3, March 1935 delivery.	Fine M. G. Oomra Hedge Contract No. 3, March 1936 delivery.	
Class ..	..	Superfine.	Fine to Superfine.	Barely fine.	Superfine.	Fine to Superfine.	Strict Superfine.	Superfine to Extra Superfine.	
Colour ..	About fine.	..	White.	Somewhat stains.	White.	Dullish white.	Bright white.	Creamish white.	
Staple Length ..	Very dull.	Little creamy.	5/8".	3/4".	3/8".	3/8".	11/16".	3/8".	
" Strength ..	5/8".	Stout.	Regular.	Fair.	Fair.	Fair.	Fair.	Fair.	
Regularity ..	Fairly regular.	Fairly regular.	Regular.	Fair.	Regular.	Regular.	Fair.	Regular.	
Value above or below Contract rate	Rs. 2 off Fine C. P. No. 1.	Rs. 6 on Fine C. P. No. 1.	Rs. 2 on.	Rs. 4 off.	Rs. 12 on.	Rs. 15 on.	Rs. 20 on.	Rs. 22 on.	
Basis ..	Rs. 19 on Fine Oomra No. 3.	Rs. 19 on Fine Oomra No. 3.	Rs. 166.	Rs. 175.	Settlement rate of F. M. G. Oomra Hedge Contract No. 3, March 1933 delivery Rs. 167.	Fine M. G. Oomra (Berar) H. C. No. 3, March 1934 delivery Rs. 190.	Fine M. G. Oomra Hedge Contract No. 3, March 1935 delivery Rs. 226.	Fine M. G. Oomra Hedge Contract No. 3, March 1936 delivery Rs. 170.	
Date of Valuation ..	18th January 1930.	18th January 1930.	20th January 1931.	9th May 1932.	25th March 1933.	7th February 1934.	30th January 1935.	2nd March 1936.	
Remarks ..	..	..	..	Black leaf.	..	..	..	..

Table 1.—SPINNING TEST RESULTS FOR C. P. No. 1 COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE RATHER (°F.).	RELATIVE HUMIDITY (%).	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.	Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R. P. M.	Spindle Speed, R. P. M.	Draft.	Turns per Inch.	Counts Actual.	Strength (lbs.).	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count-Work Product.	Evenness Class.	Steps per yard.	Turns per Inch Actual.					
644	C.P. No. 1 (Fine)	1029-30	4-2-30	10A	10	8.0	7.8	0.5	15.6	110	172	..	5.10	12.03	10.1	46.8	473	10.2	155.8	1589	6	1.5	12.1	82	67	82	67	61
644	"	1029-30	4-2-30	10B	10	..	..	..	..	60	193	..	5.21	14.29	9.7	55.2	923	9.7	211.0	2047	5	1.8	13.7	80	65	80	65	60
645	C.P. No. 1 (Superfine)	1029-30	5-2-30	10A	10	6.7	8.8	0.3	15.2	69	196	..	5.42	12.03	10.1	63.3	639	10.2	185.2	1889	5	1.5	12.1	82	66	82	66	63
645	"	1029-30	5-2-30	10B	10	..	..	..	..	30	193	..	5.53	14.29	9.8	114.6	1123	10.0	220.2	2202	5	2.0	13.6	82	63	82	63	61
999	C.P. No. 1	1030-31	12-5-31	10A	10	5.8	8.0	0.6	13.9	100	197	6800	5.21	12.63	10.3	48.4	499	10.3	190.0	1957	4	1.2	12.0	80	67	80	67	67
999	"	1030-31	12-9-31	10B	10	..	..	..	..	70	193	7500	5.21	14.29	9.9	101.4	1004	9.9	232.8	2305	4	1.5	13.6	81	66	81	66	68
1266	C.P. No. 1	1031-32	13-5-32	10A	10	5.9	9.6	0.3	14.6	138	176	5800	5.44	12.63	9.8	65.3	610	10.0	208.8	2088	4	1.0	12.1	81	66	81	66	66
1266	"	1031-32	14-5-32	10B	10	..	..	..	..	36	192	7600	5.56	14.29	9.8	100.9	880	10.1	225.6	2279	5	1.2	13.8	80	66	80	66	66
1724	C.P. No. 1	1032-33	1-4-33	10A	10	6.7	10.0	0.4	16.4	64	171	5850	5.26	12.63	9.8	78.0	764	10.1	220.8	2220	4	0.5	12.1	85	72	85	72	70
1724	"	1032-33	1-4-33	10B	10	..	..	..	..	64	101	7700	5.41	14.29	10.1	105.3	1064	10.4	220.0	2360	4	1.0	13.8	87	66	87	66	68
1724	"	1032-33	3-4-33	12B	12	..	..	..	..	109	182	7700	5.92	15.51	12.2	76.1	923	12.4	189.6	2351	4	0.8	14.9	86	69	86	69	68
2137	C.P. No. 1	1033-34	14-2-34	10A	10	3.8	12.0	0.2	15.6	44	176	6000	5.35	12.63	10.0	63.3	633	9.9	216.8	2146	4	1.0	12.6	82	66	82	66	73
2137	"	1033-34	14-5-34	10B	10	..	..	..	..	13	196	7650	5.35	14.29	9.9	116.2	1150	10.0	237.6	2376	5	1.0	14.0	82	70	82	70	74
2137	C.P. No. 1	1034-35	8-2-35	10A	10	6.9	10.4	0.1	16.7	36	176	6100	5.12	12.63	10.4	41.9	436	10.2	190.2	2032	4	1.0	12.0	80	69	80	69	68
2137	"	1034-35	8-2-35	10B	10	..	..	..	..	0	196	7600	5.12	14.29	10.2	91.7	936	10.2	219.2	2236	5	0.8	13.6	80	68	80	68	70
2137	C.P. No. 1	1035-36	7-3-36	10A	10	4.1	9.8	0.1	13.6	0	194	6000	5.26	12.63	10.5	99.8	1048	10.5	244.8	2570	3	0.5	12.2	80	67	80	67	63
2137	"	1035-36	16	10B	10	..	..	..	..	9	204	8000	5.26	14.29	10.5	146.0	1533	10.4	268.8	2766	3	0.8	13.8	82	65	82	65	63
2137	"	1035-36	36	12A	12	..	..	..	..	15	188	7300	6.30	13.92	12.6	71.4	900	12.6	188.8	2379	4	1.0	13.5	81	61	81	61	66

* Ring frame front roller diameter—7/8". Diameter of rings—1 5/16".

* Ring frame front roller diameter—7/8". Diameter of rings—1.56".

† To be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

2.—BERAR COTTON.

These samples have been very kindly supplied by the East India Cotton Association after inspection and approval by their Standards Committee in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
670.	Berar	(Fine)					
		Karanja	1929-30.	1723	Berar	Amraoti	1932-33.
663	"	(Superfine)		2136	"	Shegaon	1933-34.
		Malkapur	1929-30.				
1004	"	Amraoti	1930-31.	2656	"	Akote	1934-35.
1335	"	Murtizapur	1931-32.	3264	"	Akola	1935-36.

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	BERAR.							
	1929-30 (Fine).	1929-30 (Superfine).	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	Cream-white.	Creamy to creamy-white.	White to creamy-white; bright.	Creamy-white ..	White to creamy-white.	White; bright.	White to creamy-white.	Creamy-white.
Cleanliness ..	Fairly leafy.	Fairly leafy.	Trifle stained; a little leafy.	Somewhat stained; leafy.	Leafy.	Somewhat leafy.	Leafy.	Slightly stained; leafy.
Feel ..	Harsh.	On the rough side.	Slightly harsh.	Roughish.	Good	Good-bodied.	Roughish.	Good.
Ginning and Neppiness ..	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Many unginned seeds.	A little knotted.
Seeds ..	1.25 per cent. unginned.	1.75 per cent. unginned.	0.75 per cent. unginned.		A few seeds.			
Card sliver ..	..	..	..	Fairly clean.	Clean	Clean	Clean	Almost clean.
Card web ..	..	..	..	Good	Fairly even and nep-free.	Even and nep-free.	Good	A little neppy and cloudy.
Weight of 10 flat strips ..				16.4 grams	16.0 grams	14.6 grams	16.5 grams	23.3 grams.
Remarks ..	Regularity in staple length and strength are both fair.	Excessive yarn breakage; spinning speed lowered.		Fully-pressed.				

(b). Yarn :—

	BERAR.							
	1929-30 (Fine).	1929-30 (Superfine).	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Almost clean.
Evenness ..	Fairly even	Fairly uneven	Fairly even	Somewhat uneven.	Fairly even	Fairly uneven	Somewhat uneven.	Even.
Neppiness ..	neppy	Almost free.	Free	Practically free.	Practically nep-free.	Nep-free.	Free of nep.	Nep-free.
Stiffness ..	Slubby	Trifle slubby	Somewhat slubby.	Fairly slubby.			A little slubby	
		yarn; raw spots.						

Spinning Test Details and Results.—See Table 2 on page 6.

II. REPORT OF THE STANDARDS COMMITTEE FOR BERAR COTTON.

BERAR.

	1929-30 (Fine).	1929-30 (Superfine).	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. Fine Berar.	Fine Berar.	Fine Omra No. 3.	F. G. M. G. Broach No. 2.	F. M. G. Omra F. Hedge Contract No. 3.	F. M. G. Omra F. Hedge Contract No. 3.	Fine M. G. Omra Hedge Contract No. 3, March 1935, delivery.	Fine M. G. Omra Hedge Contract No. 3, July 1936, delivery.
Class .. ..	.. Superfine.	Superfine to extra superfine.	Fine.	Fully good to fine.	Superfine.	Superfine.	Extra superfine.	Fine.
Colour .. ..	.. White.	Normal.	Creasy-white.	Bluish white with yellow stains.	White.	White.	White.	Greyish white.
Staple length ..	.. 5/8".	5/8".	1 1/2".	5/8".	5/8".	5/8".	5/8".	5/8".
" strength ..	.. Strong.	Weakish.	Weak.	Good.	Fair.	Fair.	Fair.	Good.
Regularity ..	.. Irregular.	Irregular.	Irregular.	Regular.	Regular.	Regular.	Regular.	Regular.
Value above or below contract rate.	.. Ra. 8 on.	Ra. 5 on Fine Berar.	Ra. 1 on.	Ra. 14 off.	Ra. 5 on.	Ra. 3 on.	Ra. 7-8 on.	Par.
Basis .. ..	.. Par Fine Omra No. 3.	Par Fine Omra No. 3.	Ra. 188.	Ra. 175.	Settlement rate of F. M. G. Omra Hedge Contract No. 3, March 1933, delivery Ra. 107.	F. M. G. Omra F. Hedge Contract No. 3, March 1934, delivery Ra. 100.	Fine M. G. Omra Hedge Contract No. 3, March 1935, delivery Ra. 226.	Fine M. G. Omra Hedge Contract No. 3, July 1936, delivery Ra. 208.
Date of Valuation	.. 28-1-30.	18-1-30.	5-3-31.	9-5-32.	25-3-33.	7-2-34.	30-1-35.	24-6-36.
Remarks .. ..	..	..	..	Black leaf.	..	..	..	..

Table 2.—SPINNING TEST RESULTS FOR BERAR COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.								TEMPERATURE (°F.)		RELATIVE HUMIDITY (%).		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Draft.	Turns per inch.	LZL.		BALISTO.		Livencus Class.	Steps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.			
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.							Work of Rupture (inch-lb.)	Count-Work Product.
670	Fine	1929-30	8-2-30	10A	10	11.1	9.6	0.5	10.5	110	175	..	5.21	12.63	9.9	49.5	490	9.9	108.8	1071	4	2.0	12.0	80	65	60
670	Beur	1929-30	6-2-30	10B		..	..	..	..	113	194	..	5.32	14.29	9.9	83.5	827	10.1	184.0	1858	5	2.2	13.6	80	64	63
663	Superfine Beur	1929-30	4-2-30	10A	9	12.3	9.4	0.5	20.9	80	172	..	5.21	12.63	10.3	41.8	401	10.3	143.4	1477	6	1.5	12.0	82	67	52
663	"	1929-30	4-2-30	10B		..	..	..	..	30	183	..	5.21	14.29	10.1	79.0	804	10.4	173.0	1769	0	1.8	13.0	80	65	51
1004	Beur	1930-31	16-3-31	10A	10	9.8	9.6	0.8	19.1	200	180	8350	5.00	12.63	10.2	31.4	320	10.3	133.8	1263	5	1.0	12.0	84	65	66
1004	"	1930-31	17-3-31	10B		..	..	..	..	100	188	7250	5.10	14.29	10.2	59.0	602	10.2	186.0	1897	5	2.0	13.7	83	66	69
1335	Beur	1931-32	13-5-32	10A	10	8.0	10.2	0.6	17.9	145	176	5000	5.43	12.63	10.2	34.0	317	10.2	176.4	1709	5	0.5	12.2	91	60	63
1335	"	1931-32	14-5-32	10B		..	..	..	..	173	182	7200	5.43	14.29	9.8	73.5	730	10.2	105.2	1091	1	1.0	13.8	89	67	65
1723	Beur	1932-33	1-4-33	10A	10	12.0	11.9	0.6	22.9	135	171	5850	5.10	12.63	9.8	49.5	485	9.8	195.0	1940	4	1.2	12.3	95	72	70
1723	"	1932-33	1-4-33	10B		..	..	..	..	191	191	7700	5.29	14.29	9.8	84.5	828	9.9	203.4	2063	4	1.0	14.0	87	66	68
2136	Beur	1933-34	14-2-34	10A	10	8.0	12.3	0.4	19.6	55	176	6000	5.47	12.63	10.1	63.0	630	10.3	210.4	2167	4	1.0	12.2	82	66	72
2136	"	1933-34	14-2-34	10B		..	..	..	..	44	196	7650	5.47	14.29	9.8	111.7	1005	10.0	239.2	2392	5	0.8	13.9	83	70	72
2656	Beur	1934-35	8-2-35	10A	10	10.2	10.7	0.3	20.0	55	180	6250	5.12	12.63	10.0	46.8	468	10.1	104.4	1063	5	1.2	12.2	83	69	72
2656	"	1934-35	8-2-35	10B		..	..	..	..	36	194	7500	5.25	14.29	10.2	82.8	845	10.0	216.0	2160	5	1.0	13.8	81	88	74
3264	Beur	1935-36	6-7-36	10A	10	9.5	11.8	0.2	20.4	18	193	7000	5.34	12.63	10.1	62.8	634	10.2	221.6	2260	3	1.0	12.0	87	73	70
3264	"	1935-36	7-7-36	10B		..	..	..	..	0	200	7550	5.34	14.29	10.1	106.6	1077	10.1	237.6	2402	3	0.5	13.6	86	73	70

* The ring frame front roller diameter—7/8". Diameter of rings—1 5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

3.—KHANDESH COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
662	Khandesh (Superfine)	Dhulia.	1929-30.	1722	Khandesh	Dhulia.	1932-33.
661	" (Fine)	Amalner.	1929-30.	2138	"	"	1933-34.
1001	"	Dhulia.	1930-31.	2655	"	"	1934-35.
1432	"	Chopda.	1931-32.	3265	"	Amalner.	1935-36.

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1934-35 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1935-36:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KHANDESH.							
	1929-30. (Superfine).	1929-30. (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	Creamy white; dull.	Creamy white; dull.	White to creamy white; fairly bright.	Dull creamy.	White to creamy white.	White to creamy white.	White to creamy white.	Creamy-white to creamy.
Cleanliness ..	Fairly leafy; a little stained.	Fairly leafy (very fine leaf). A trifle stained.	A little leafy; occasional spot of stain.	Leafy	Leafy	Leafy; occasionally stained.	Leafy	Leafy; stained.
Feel ..	Rough	Roughish	Good	..	Good softish.	Good	Slightly rough.	Good.
Ginning and neppiness ..	Well ginned	A fair amount of sand.	Well ginned	Fairly well ginned.	Well ginned	Well ginned	Well ginned	So somewhat knotted.
Seeds ..	0.8 % unginned.	1 % unginned seeds.	..	1.4 % unginned.	..	..	..	Few unginned seeds.
Card sliver ..	Very clean	..	Clean	Clean	Clean	Clean	Clean	Little leafy.
Card web ..	Clear	Clear	First class	Fairly good.	Even and nepp-free.	Even and nepp-free.	Good	Trifle neppy and cloudy.
Weight of ten flat strips.	15.1 grams.	15.3 grams.	10.1 grams; very light.	15.8 grams	14.8 grams	15.2 grams	17.1 grams	24.5 grams.
Remarks ..	Staple even and strong.	Staple short but regular in length and fairly strong.	..	..	..	..	..	A wasty sample.

(b) Yarn :—

	KHANDESH.							
	1929-30. (Superfine).	1929-30. (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean	Clean	Clean	Clean	Clean	Almost clean.	Clean	A little leafy.
Evenness ..	Fairly even	Fairly even	Fairly even	Even	Even	Fairly uneven.	Even in the	Fairly even
Neppiness ..	A little neppy	A little neppy	Fairly nepp-free	Practically nepp-free.	Nep-free	Nep-free	..	..
Slubbiness	Somewhat slubby.	Fairly slubby.	..	..	..	..	..	..
Remarks ..	Slubbiness more prominent than neppiness.	..	..	..	..	..	A little slubby.	..

3. *Spinning Test Details and Results*.—See Table 3 on page 9.

II. REPORT OF THE STANDARDS COMMITTEE FOR KHANDESH COTTON.

KHANDESH									
	1929-30. (Superfine.)	1929-30. (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	Fine Khandesh.	Fine Khandesh.	Fine Oomra No. 3.	F. G. M. G. Brooch No. 2.	Fine M. G. Oomra Hedge No. 3.	Fine M. G. Oomra (Bemar) H.C. No. 3.	Fine M. G. Oomra Hedge No. 3, March 1935 delivery.	Fine M. G. Oomra H.C. No. 3, July 1938 delivery.	
Class .. ..	..	..	..	..	..	..	..	..	..
Colour .. ..	..	..	..	..	..	..	..	..	..
Staple Length .. ..	..	..	..	..	..	..	..	..	..
Staple Strength .. ..	..	..	..	..	..	..	..	..	..
Regularity .. ..	..	..	..	..	..	..	..	..	..
Valued above or below contract rate.	Rs. 5 on Fine Khandesh.	Rs. 3 on Fine Khandesh.	Rs. 2 on.	Rs. 15 off.	Rs. 2 on.	Rs. 4 off.	Par.	Rs. 10 off.	
Basis	Rs. 7 off Fine Oomra No. 3.	Rs. 7 off Fine Oomra No. 3.	Rs. 188.	Rs. 219.	Settlement rate of Fine M. G. Oomra Hedge Contract No. 3, March 1933 delivery, Rs. 167.	Fine M. G. Oomra (Bemar) H.C. No. 3, March 1934 delivery, Rs. 190.	Fine M. G. Oomra Hedge Contract No. 3, March 1935 delivery, Rs. 228.	Fine M. G. Oomra H.C. No. 3, July 1938 delivery, Rs. 208.	
Date of Valuation	18-1-30.	18-1-30.	5-3-31.	17-8-32.	25-3-33.	7-2-34.	30-1-35.	24-6-36.	
Remarks .. ..	..	..	Slightly black leafy.	Poor style cotton being end of season.	..	..	..	..	..

Table 3.—SPINNING TEST RESULTS FOR KHANDESH COTTON.

Sample No.	Season.	Ditto Spinning.	Counts Nominal.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FRAME PARAMETERS.*				YARN TEST RESULTS.										TEMPERATURE AVERAGED FLUCTUATION (°F.).		Spinning Room.	Spinning Room.	Testing Room.
					Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles	Front Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Draft.	Turns per inch.	Counts Actual.	Strength (lbs.)	Count - Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count Work Product.	Neeps per yard.	Turns per inch Actual.						
																						Lea.	Count. Strength	Count. Product.				Count. Class.	Neeps per yard.	Turns per inch Actual.
662	1929-30	3-2-30	10A	10	11.2	7.8	0.3	19.4	110	190	..	5.87	12.83	10.2	56.6	577	10.5	152.2	1598	6	2.0	12.1	81	63	67		
662	1929-30	1-2-30	10B		..	..	..	..	50	193	..	5.87	14.20	10.1	95.1	900	10.3	197.4	2033	5	1.8	13.7	81	62	67
661	1929-30	3-2-30	10A	10	11.9	8.0	0.3	19.9	100	190	..	5.74	12.83	10.1	55.1	530	10.4	150.0	1500	5	2.2	12.1	81	63	66		
661	1929-30	3-2-30	10B		..	..	..	..	20	193	..	5.74	14.20	10.1	91.9	928	10.3	187.8	1934	5	1.8	13.5	81	62	65
1001	1930-31	13-3-31	10A	10	8.7	7.4	0.6	16.0	20	195	8350	5.25	12.83	10.1	77.5	784	10.3	209.2	2165	4	2.5	11.8	83	70	67		
1001	1930-31	13-3-31	14A		..	..	..	..	20	192	8350	5.24	14.08	13.8	44.3	611	14.0	197.6	1786	5	3.0	14.2	82	67	66
1001	1930-31	13-3-31	14B		..	..	..	..	100	190	8760	5.97	16.85	14.7	55.9	822	14.3	140.8	2013	6	3.2	16.2	82	69	69
1432	1931-32	25-8-32	16A	9	18.3	11.3	0.7	29.3	47	190	8550	5.11	15.97	15.7	80.3	1261	15.4	141.8	2184	3	1.0	15.2	89	72	70		
1432	1931-32	25-8-32	20		..	..	..	..	114	185	9000	5.56	17.98	19.6	59.0	1156	19.6	105.4	2066	3	1.2	17.2	90	67	71
1722	1932-33	31-3-33	12A	10	11.1	9.2	0.6	19.8	124	190	7800	5.21	13.92	12.0	66.7	800	11.9	192.0	2285	3	0.5	13.4	85	69	71		
1722	1932-33	31-3-33	12B		..	..	..	..	190	198	7950	5.21	14.08	12.0	82.0	905	11.8	198.8	2322	3	0.8	14.2	86	65	70
1722	1932-33	31-3-33	16B		..	..	..	..	164	174	8700	5.78	17.86	16.3	53.3	869	16.1	143.6	2312	4	0.8	17.1	87	65	70
2138	1933-34	14-2-34	16A	10	11.1	11.0	0.4	21.7	27	202	7000	5.71	12.83	9.9	100.8	1053	10.1	233.6	2350	4	1.0	12.2	82	70	72		
2138	1933-34	15-2-34	12B		..	..	..	..	15	194	7650	5.44	14.68	12.6	93.7	1181	11.5	200.4	2374	5	1.0	14.2	81	68	73
2138	1933-34	15-2-34	14B		..	..	..	..	65	186	8500	6.38	16.85	13.8	84.9	1172	13.8	171.6	2368	6	1.2	16.4	82	67	72
2555	1934-35	9-2-35	10A	10	11.1	10.7	0.4	20.9	45	196	8650	5.37	12.83	10.0	87.1	871	9.9	210.6	2174	4	1.5	12.0	80	68	74		
2555	1934-35	11-2-35	12B		..	..	..	..	36	196	7900	5.38	14.08	12.5	69.6	870	12.3	184.4	2268	5	1.2	13.8	81	70	76
2555	1934-35	11-2-35	14B		..	..	..	..	65	182	8250	6.13	16.85	14.2	63.7	976	14.2	156.6	2210	6	1.2	16.0	83	69	68
3265	1935-36	6-7-36	10A	10	11.2	13.1	0.4	23.1	18	196	8050	5.33	12.83	10.0	67.0	870	9.9	235.2	2328	4	1.0	12.3	87	72	70		
3265	1935-36	6-7-36	12A		..	..	..	..	15	198	8000	5.31	14.68	11.9	63.9	820	11.6	209.2	2197	5	1.5	14.2	87	71	70
3265	1935-36	14-7-36	12B		..	..	..	..	58	197	8750	5.42	15.68	12.0	81.8	982	12.2	196.4	2366	4	0.8	15.3	87	71	72
3265	1935-36	7-7-36	14B		..	..	..	..	80	188	8300	6.22	16.85	14.0	64.6	904	14.1	174.4	2459	5	1.2	16.4	86	74	71

* Diameter of ring frame front roller—7/8". Diameter of rings—1 5/8".
† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

4.—NANDED COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Season.	Sample No.	Cotton.	Season.
669	Nanded.	1929-30.	2195	Nanded.	1933-34.
1003	"	1930-31.	2712	"	1934-35.
1338	"	1931-32.	3111	"	1935-36.
1725	"	1932-33.			

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—Same as above but spun from single hank roving on Ring Frame No. 3 which, is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	NANDED.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white ; brightish.	White to Creamy-white.	Creamy-white.	Creamy-white ; dull.	Creamy-white.	Creamy-white.	White.
Cleanliness	Leafy ; a trifle stained.	Leafy ; some what stained.	Leafy ; some what stained.	Leafy	Leafy ; a little stained.	Leafy (very fine leaf).	Leafy.
Feel	Good-bodied ..	..	..	Soft	Good	Good	Good.
Ginning and Neppiness ..	Fairly well-ginned.	Well-ginned ..	..	Well-ginned ..	Well-ginned ..	Somewhat knotted.	Well-ginned.
Seeds	1.4% ..	1.25% ..	Some cut seed.	0.94% ginned and unginned	..	..	Contains a few full clean seeds.
Card Sliver .. ..	..	Clean ..	A little leafy ..	Almost clean ..	Clean	Slightly leafy.	A little leafy.
Card Web	A trifle nappy.	Very good ..	Good	Nep-free and even.	Even	A little nappy.	Good.
Weight of ten flat strips ..	17.0 grams ..	12.3 grams ..	17.8 grams ..	17.4 grams ..	19.4 grams ..	24.6 grams ..	14.3 grams.
Remarks	Staple even and fairly strong.	..	..	..	..	..	..

(b) Yarn :—

	NANDED.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean	Clean	A trifle leafy ..	Almost clean ..	A little leafy ..	Fairly leafy ..	Almost clean.
Evenness	Even	Even in lower count.	Even	Even	Even in the two lower counts.	Even	Fairly even.
Neppiness	A trifle nappy.	A little nappy	Almost free of nep.	Practically free of nep.	Somewhat nappy.	Nappy	A little nappy.
Slubbiness .. ..	..	Higher counts a little slubby.	..	..	..	A little slubby.	..
..

3. *Spinning Test Details and Results* :—See Table 4 on page 12.

II. REPORT OF THE STANDARDS COMMITTEE FOR NANDED.

NANDED.								
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	F. G. Broach No. 2	F. G. Broach No. 2	F. G. M. G. Broach No. 2	F. G. M. G. Broach Hedge Contract No. 2	F. G. M. G. Broach April/May delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery.	
Class	Fully good to fine	Fully good	Fine	Fine	Fully good	Fine	Fine.	
Colour	A little dull	Greyish	Considerably Bluish White and stains.	Bluish White	Greyish white	Greyish white	Dull whitish.	
Staple Length	15/16 inch	5/8 inch	3/4 inch	7/8 inch	Full 7/8 inch	7/8 inch	7/8 inch.	
Staple Strength	Very strong	Fair	Fair	Good	Good	Good	Fair to good.	
Regularity	Regular	Irregular	Irregular	A bit irregular	Regular	Irregular	Irregular.	
Value above or below contract rate	Rs. 40 on F. G. Broach April/May	Rs. 31 off	Rs. 15 on	Rs. 15 on	Rs. 25 on	Rs. 50 on	Rs. 25 on.	
Basis	....	Rs. 222	Rs. 175	Settlement rate of F. G. M. G. Broach Hedge Contract No. 2, April/May 1933 delivery Rs. 177.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1934 delivery Rs. 201.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1935 delivery Rs. 222.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery Rs. 189.	
Date of Valuation	28-1-30	5-3-31	9-5-32	25-3-33	15-3-34	20-3-35	2-3-36	
Remarks	Not so silky or waxy as F. G. M. G. Latur.	Black leaf	....	....	....	....	....

Table 4.—SPINNING TEST RESULTS FOR NAEDED COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE. (°F.).	RELATIVE HUMIDITY (%)
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 Spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	L.S.A.			BILKISTO.			Neeps per yard.	Turns per Inch. Actual.					
															Counts Actual.	Strength (lbs.)	Count Strength	Counts Actual.	Work of Rupture (Inch-lb.)	Count-Work Product.							
669	Nanded ..	1929-30	6-2-30	20A	10	14.5	9.0	0.2	22.0	30	191	..	5.21	17.08	20.0	81.8	1030	20.4	119.2	2422	4	1.2	17.2	81	55		
669	Nanded ..	1929-30	7-2-30	20B	10	..	..	..	..	0	193	..	5.32	20.23	19.8	81.4	1071	19.8	125.0	2475	4	4.2	19.2	82	56
1003	Nanded ..	1930-31	14-3-31	12	0	13.9	8.7	0.7	21.6	40	189	7400	4.67	13.92	12.1	77.0	932	12.1	205.8	2400	34	1.7	13.4	81	08		
1003	Nanded ..	1930-31	16-3-31	16A	..	..	..	..	..	47	166	7530	5.38	15.07	15.8	11.6	657	16.1	118.0	1009	5	3.2	15.3	80	03
1003	Nanded ..	1930-31	16-3-31	16B	..	..	..	..	..	80	172	8900	5.53	18.10	16.8	56.1	917	16.8	110.4	2006	5	2.2	17.5	82	05
1338	Nanded ..	1931-32	16-3-32	12	10	9.7	10.0	0.5	19.2	87	187	7330	5.31	13.92	12.1	65.3	790	11.9	136.0	2213	3	1.2	13.4	90	67		
1338	Nanded ..	1931-32	18-3-32	16	..	..	..	..	..	125	178	8000	5.06	17.08	16.2	50.0	907	16.0	128.8	2061	4	1.5	17.4	91	71
1725	Nanded ..	1932-33	3-4-33	16	10	13.8	9.7	0.4	22.5	24	191	8450	5.43	15.07	15.8	99.1	1350	15.8	177.2	2800	3	2.0	15.2	86	65		
1725	Nanded ..	1932-33	3-4-33	20	..	..	..	..	..	83	180	9200	5.13	17.08	19.8	72.8	1441	20.2	120.2	2428	4	1.0	17.2	83	05
1725	Nanded ..	1932-33	5-4-33	24	..	..	..	..	..	82	171	9200	6.51	19.73	23.0	54.4	1300	24.1	99.6	2400	4	1.5	18.9	87	61
2165	Nanded ..	1933-34	20-3-34	20	10	13.8	10.9	0.6	23.6	47	193	9450	6.10	17.08	19.8	83.3	1641	10.5	134.4	2621	3	2.5	17.2	85	60		
2165	Nanded ..	1933-34	22-3-34	24	..	..	..	..	..	59	176	9150	6.02	19.73	23.8	62.1	1478	24.0	103.6	2486	4	3.5	19.1	84	71
2165	Nanded ..	1933-34	22-3-34	30	..	..	..	..	..	73	140	9000	7.57	23.11	30.2	41.6	1256	30.6	80.8	2472	6	3.0	22.2	86	70
2712	Nanded ..	1934-35	6-4-35	20	10	11.7	12.8	0.5	23.4	36	192	9400	5.83	17.98	20.4	63.7	1200	20.0	125.2	2164	3	4.8	17.2	83	09		
2712	Nanded ..	1934-35	8-4-35	24	..	..	..	..	..	45	174	9600	5.14	19.73	24.1	51.1	1292	22.0	106.0	2427	4	4.2	18.9	83	70
2712	Nanded ..	1934-35	8-4-35	30	..	..	..	..	..	43	139	8850	6.81	23.26	29.7	45.7	1357	29.7	81.2	2530	5	5.8	22.6	85	70
3111	Nanded ..	1935-36	9-3-36	20	10	9.1	8.5	0.3	17.0	17	190	9250	6.10	17.08	20.2	87.6	1770	20.6	127.4	2624	4	1.8	16.8	82	64		
3111	Nanded ..	1935-36	10-3-36	24	..	..	..	..	..	0	174	9400	5.78	19.73	23.7	67.2	1593	24.3	108.2	2629	4	1.2	18.8	80	67
3111	Nanded ..	1935-36	10-3-36	30	..	..	..	..	..	17	158	9100	7.29	21.86	30.7	44.3	1300	30.5	81.4	2483	5	2.2	21.1	81	63

* Diameter of ring frame front roller— $\frac{1}{8}$ inch. Diameter of rings— $\frac{1}{16}$ inch.

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

5.—LATUR COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Season.	Sample No.	Cotton.	Season.
668	Latur	1929-30.	2194	Latur	1933-34.
1002	"	1930-31.	2713	"	1934-35.
1339	"	1931-32.	3112	"	1935-36.
1726	"	1932-33.			

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once) Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—Same as above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

		LATUR.					
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Colour .. ..	..	Creamy-white ; bright.	Creamy-white ..	Creamy ..	Dullish white to creamy-white.	Creamy-white ..	White to creamy-white ; brightish.
Cleanliness ..	..	Leafy ..	Leafy ; stained.	Very leafy (large size leaf) ; slightly stained.	Very leafy ..	Leafy ; a little stained.	Very leafy ; a little stained.
Feel .. ..	..	Good soft ..	Soft silky ..	Soft ..	Good ..	Good ..	Good ..
Ginning ..	..	Very well-ginned.	Well-ginned ..	Fairly well-ginned.	Well-ginned ..	Fairly well-ginned.	Well-ginned ..
Neppiness ..	..	1.9% ..	1.5% ..	1.3% ..	Some with a little leafy.	Fairly clean ..	Almost clean ..
Seeds .. ..	..	Clean ..	Clean ..	Almost clean ..	Even, nep-free and shed much leaf.	Good ..	Fairly good ..
Card Sliver ..	..	Clear ..	Good ..	Good ..	Good ..	Fairly good ..	Even ; nep-free.
Card Web ..	..	Clear ..	Good ..	Good ..	Good ..	Fairly good ..	Even ; nep-free.
Weight of ten flat strips.	..	14.0 grams ; light.	17.6 grams ..	17.9 grams ..	19.5 grams ..	20.8 grams ..	20.7 grams ..
Remarks ..	..	Good sample ; staple fairly fine and strong.	..	..	Gave a leafy lap.	..	..

(b) *Yarn* :—

		LATUR.					
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Cleanliness ..	..	Clean ..	Clean ..	Fairly-clean ..	Almost clean ..	A little leafy ..	Fairly clean ..
Evenness ..	..	Even ..	Even ..	Even ..	Even ..	Even in the two lower counts.	Even ..
Neppiness ..	..	A little neppy.	A little neppy.	Almost free of nep.	Practically free of nep.	Some with a little neppy.	A little neppy.
Slubbiness ..	..	..	..	..	Shows an occasional slab.	..	Slightly slubby.
Remarks ..	..	..	..	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 5 on page 15.

II. REPORT OF THE STANDARDS COMMITTEE FOR LATUR.

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LATUR.									
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.		
Contract valued under ..	F. G. Broach No. 2 ..	F. G. Broach No. 2 ..	F. G. M. G. Broach No. 2.	F. G. M. G. Broach Hedge Contract No. 2.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1934 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery.		
Class ..	Fine ..	Fully good ..	Fully good to fine ..	Fine ..	Fully good ..	Strict fine ..	Fine.		
Colour ..	White ..	Dull creamy ..	Considerably Bluish White and stains.	White ..	Grey ..	Greyish white ..	Whitish.		
Staple Length ..	1 inch ..	Barely 7/8 inch ..	Full 7/8 inch ..	7/8 inch ..	7/8 inch ..	27/32 inch ..	7/8 inch.		
Staple Strength ..	Very strong ..	Good ..	Fair ..	Fair ..	Good ..	Good ..	Good.		
Regularity ..	Regular ..	Irregular ..	Fairly regular ..	Irregular ..	Irregular ..	Regular ..	Irregular.		
Value above or below contract rate.	Rs. 50 on F. G. Broach April/May.	Rs. 15 off ..	Rs. 30 on ..	Rs. 12 on ..	Rs. 20 on ..	Rs. 55 on ..	Rs. 30 on ..		
Basis ..		Rs. 222 ..	Rs. 175 ..	Settlement rate of F. G. M. G. Broach Hedge Contract No. 2, April/May 1933 delivery Rs. 177.	Fully Good M. G. Broach Hedge Contract No. 2, April/May 1934 delivery Rs. 202.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1935 delivery Rs. 222.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery Rs. 180.		
Date of Valuation ..	28-1-30 ..	5-3-31 ..	9-5-32 ..	25-3-33 ..	8-3-34 ..	26-3-35 ..	2-3-36.		
Remarks ..	Black leaf ..	Slightly stained and black tints.	....	....	....	....	....

Table 5.—SPINNING TEST RESULTS FOR LATUR COTTON.

Table 5.—SPINNING TEST RESULTS FOR LATOUR COTTON.																													
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).	Testing Room.	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 Spindles per hour.	Bronze Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	LEA.		BALISTO.		Neeps per yard.	Evenness Class.	Turns per inch Actual.	Spinning Room.	Count-Work Product.						
															Counts Actual.	Strength (lbs.)	Count Strength Product.	Counts Actual.						Work of Rupture (inch-lb.)					
668	Latour	1929-30	6-2-30	20A	10	12.2	8.3	0.3	19.7	35	194	..	5.21	17.08	10.7	80.5	1704	10.9	129.4	2576	5.2	4	20.0	129.4	2576	17.1	81	55	50
668	Latour	1929-30	7-2-30	20B	..	..	..	..	..	10	193	..	5.32	20.23	10.8	84.6	1076	20.0	133.8	2676	4.2	4	20.0	133.8	2676	10.2	82	60	50
1002	Latour	1930-31	14-3-31	20	10	13.1	9.5	0.5	21.8	0	195	9450	0.58	17.08	20.2	60.4	1402	20.0	122.2	2444	3.5	3½	20.0	122.2	2444	17.1	82	60	60
1002	Latour	1930-31	14-3-31	21A	..	..	..	..	..	20	175	9475	0.70	19.73	23.8	53.8	1280	24.0	97.6	2430	4.0	4½	24.0	97.6	2430	18.7	81	67	60
1002	Latour	1930-31	16-3-31	21B	..	..	..	..	..	36	183	10500	0.89	20.74	24.4	55.0	1342	24.0	97.2	2429	3.7	4½	24.0	97.2	2429	19.7	80	64	68
1339	Latour	1931-32	18-3-32	20	10	11.0	10.1	0.6	21.2	47	194	9550	0.34	17.08	20.1	65.2	1311	20.2	121.0	2444	1.5	4	20.2	121.0	2444	17.4	80	71	66
1339	Latour	1931-32	18-3-32	21A	..	..	..	..	..	40	160	9200	0.94	19.73	23.7	61.4	1218	23.0	99.4	2376	2.0	4	23.0	99.4	2376	19.0	82	60	67
1339	Latour	1931-32	19-3-32	21B	..	..	..	..	..	36	174	9600	7.08	20.74	23.6	56.8	1317	23.7	101.2	2520	2.0	5	23.7	101.2	2520	20.0	83	65	66
1726	Latour	1932-33	3-4-33	20	10	10.6	10.5	0.0	20.5	69	186	9200	5.47	17.08	19.8	72.0	1426	20.0	125.4	2508	1.5	4	20.0	125.4	2508	17.4	88	65	69
1726	Latour	1932-33	5-4-33	21A	..	..	..	..	..	86	171	9200	0.80	19.73	23.9	60.2	1176	21.1	102.4	2108	1.8	4	21.1	102.4	2108	19.1	87	64	70
1726	Latour	1932-33	5-4-33	21B	..	..	..	..	..	100	184	10000	0.89	20.74	24.0	55.5	1332	23.7	103.2	2440	1.2	4	23.7	103.2	2440	20.1	87	65	69
2101	Latour	1932-31	20-3-31	20	10	11.4	12.3	0.6	25.4	73	193	9450	6.22	17.08	20.3	72.2	1406	20.3	121.4	2525	2.2	3	20.3	121.4	2525	17.2	85	60	72
2101	Latour	1932-31	22-3-31	21	..	..	..	..	..	65	176	9450	5.80	19.73	23.0	60.5	1446	23.6	106.6	2310	2.6	4	23.6	106.6	2310	18.8	84	71	71
2104	Latour	1932-31	22-3-31	30	..	..	..	..	..	53	140	9000	7.35	23.11	20.0	44.2	1308	20.7	82.4	2447	2.2	0	20.7	82.4	2447	22.1	80	70	71
2713	Latour	1931-33	8-1-33	20	10	10.8	11.0	0.2	20.8	0	198	9000	5.05	17.08	20.3	70.8	1620	20.6	130.0	2678	1.0	3	20.6	130.0	2678	17.1	83	69	64
2713	Latour	1931-35	9-1-35	24	..	..	..	..	..	32	176	9600	5.80	19.73	24.1	62.0	1509	24.6	109.0	2681	2.0	4	24.6	109.0	2681	19.0	83	65	68
2713	Latour	1931-35	9-1-35	30	..	..	..	..	..	17	138	8760	7.08	23.25	30.1	49.3	1484	30.7	90.0	2703	1.8	5	30.7	90.0	2703	22.7	83	70	67
3112	Latour	1935-30	10-3-30	20	10	11.6	9.2	0.3	19.9	26	190	9350	5.80	17.08	20.3	63.3	1285	20.3	118.8	2412	1.8	4	20.3	118.8	2412	17.3	78	61	63
3112	Latour	1935-30	10-3-30	21	..	..	..	..	..	14	171	9350	6.38	19.73	23.0	47.2	1128	24.4	96.4	2522	1.5	5	24.4	96.4	2522	18.9	80	63	63

* Diameter of ring frame front roller— $\frac{1}{8}$ inch. Diameter of rings— $\frac{1}{16}$ inch.

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

6.—MUTTIA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
666	Muttia (F.G.)	Bhavnagar.	1929-30	1885	Muttia	Gondal	.. 1932-33
667	" (Fine)	"	.. 1929-30	2193	"	Bhavnagar	.. 1933-34
1000	"	"	.. 1930-31	2714	"	"	.. 1934-35
1337	"	Botad	.. 1931-32	3113	"	Amreli	.. 1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) Blow-room.—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber. Inter, Rover and spun from single hank roving on Ring Frame No. I, 1934-35 and 1935-36:—Same as above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. I possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	MUTTIA.							
	1929-30 (Fully good.)	1929-30 (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy ..	Creamy; less dull than F. G.	Dull creamy-white.	Creamy-white.	Dullish creamy-white.	White to creamy white.	Creamy-white; dullish.	White to creamy white.
Cleanliness ..	Very leafy ..	A trifle stained; very leafy.	Stained; very leafy.	Somewhat stained; very leafy—sand-like leaf.	Leafy ..	Stained; very leafy.	Stained; very leafy.	Stained; very leafy.
Feel	Dull .. ..	..	Poor .. ..	..	Softish ..	Rough ..	Roughish ..	Somewhat softish.
Ginning and piness.	Nep. Ginning out the seeds badly.	Ginning has knotted a good deal and cut the seeds very badly indeed.	..	..	..	..	Somewhat knotted.	Fairly well ginned.
Seeds	2.2% ginned and unginned.	4.25% ginned and unginned.	0.75% seeds ..	1.4% ginned and unginned.	1.5% unginned	Contains many unginned seeds.	..	..
Card Sliver ..	Clean .. ..	..	Fairly clean ..	Clean	Clean	Almost clean ..	Almost clean ..	Almost clean.
Card Web	Clean	Somewhat neppy.	Good	Good	Good	Fairly good ..	Fairly good ..	Good.
Weight of 10 flat strips.	13.8 grams	17 grams.	12.5 grams	15.5 grams	21.9 grams	19.9 grams	18.4 grams	13.8 grams.
Remarks	Very wastey; a very poor sample indeed.	..	Very wastey ..	Responded well to treatment	..	..	..	..

(b) Yarn :—

	MUTTIA.							
	1929-30. (Fully good.)	1929-30 (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Clean	Clean	Clean	Clean	Clean	Clean	Almost clean ..	Clean.
Evenness	Fairly even ..	Even	Even to fairly even.	Somewhat uneven.	Fairly even in the lower count.	Fairly even ..	Even	Even.
Neppiness	Fairly nep-free.	Free of nep ..	Fairly nep-free.	Practically free of nep.	Free of nep ..	Nep-free ..	Free of nep ..	Almost nep-free.
Slubbiness	Only occasional slab.	Free of slab ..	..	Fairly slubby ..	A trifle slubby.	..	A trifle slubby.	..
Remarks .. ..	..	A good round thread.	..	..	..	..	..	..

3. Spinning Test Details and Results :—See Table 6 on page 18.

II. REPORT OF THE STANDARDS COMMITTEE FOR MUTTIA.

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MUTTIA.									
	1929-30 (Fully good.)	1929-30 (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	Fully good Muttia	Fully good Muttia	Fine Oomra No. 3	R. G. M. G. Broach No. 2.	Fine M. G. Oomra Hedge Contract No. 3 Dec./Jan. 1934 delivery.	Fine M. G. Oomra Hedge Contract No. 3 March 1934 delivery.	Fine M. G. Oomra Hedge Contract No. 3 May 1935 delivery.	Fine M. G. Oomra Hedge Contract No. 3 March 1936 delivery.	
Class	Fully good	Barely fine	Fully good to fine	Fully good to fine	Superfine ..	Fine to superfine ..	Fine to superfine ..	Strict Fine.	
Colour	Greyish	Dull	Dull	Brownish ; some what stained.	Whitish ..	Whitish ..	Brownish-white ..	Whitish Dull.	
Staple Length ..	3/4 inch ..	3/4 inch ..	3/4 inch ..	3/4 inch ..	3/4 inch ..	3/4 inch ..	3/4 inch ..	3/4 inch.	
Staple Strength ..	Good to strong	Fair	Fair	Weak ..	Fair ..	Good ..	Good ..	Fair.	
Regularity ..	Rather irregular	Normal ..	Regular.	Irregular ..	Regular ..	Regular ..	Fair ..	Regular.	
Value above or below contract rate.	Par ..	Rs. 5 on ..	Rs. 5 off ..	Rs. 20 off ..	Rs. 10 off ..	Rs. 10 off ..	Rs. 10 off ..	Rs. 7 off.	
Basis	Rs. 15 off fine Oomra No. 3.	Rs. 15 off fine Oomra No. 3.	Rs. 108	Rs. 175	Fine M. G. Oomra Hedge Contract No. 3 Dec./Jan. 1934 dely. Rs. 199.	Fine M. G. Oomra Hedge Contract No. 3 March 1934 dely. Rs. 176.	Fine M. G. Oomra Hedge Contract No. 3 May 1935 dely. Rs. 198.	Fine M. G. Oomra Hedge Contract No. 3 March delivery Rs. 170.	
Date of valuation ..	28-1-30 ..	28-1-30 ..	5-3-31 ..	9-5-32 ..	26-7-33 ..	8-3-34 ..	20-3-35 ..	2-3-36.	
Remarks	Better than average Bhavnagar.								

Table 6.—SPINNING TEST RESULTS FOR MUTTIA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of spinning.	Counts Nominal.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.							TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).	Testing Room.			
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Yarn Breakages per 100 Spindles.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	I.E.A.		BUILDING.		Tensile Class.	Keps per yard.				Turns per inch Actual.		
															Counts Actual.	Strength (lbs.).	Count Strength	Count Actual.							Work (inch-lb.)	Count Product.
663	Muttia (Fully good).	1929-30	5-2-30	10A	10	20.7	9.1	0.5	28.0	0	106	788	5.42	12.03	10.1	78.0	10.3	181.4	1868	5	2.2	12.1	82	60	66	
664	"	1929-30	5-2-30	100						20	103	1145	5.33	14.29	9.0	115.7	10.0	203.2	2032	5	2.7	13.7	82	63	57	
667	Muttia (Fine)	1929-30	5-2-30	10A	10	20.6	9.5	0.3	28.4	10	191	618	5.42	12.03	9.8	96.7	9.7	207.2	2010	4	1.5	12.0	81	61	61	
637	"	1929-30	5-2-30	10C						40	106	1201	5.63	14.29	10.0	120.1	10.0	207.0	2070	4	2.2	13.6	81	62	64	
1000	Muttia	1930-31	12-2-31	10	10	17.7	8.5	0.5	25.0	0	107	6000	5.31	12.03	9.8	112.2	9.7	229.6	2227	3	2.2	12.0	80	67	70	
1000	Muttia	1930-31	12-3-31	11A						27	170	7300	5.42	14.08	13.9	54.3	13.8	135.2	1800	5	3.7	11.4	82	67	68	
1000	Muttia	1930-31	12-3-31	11B						53	109	8760	5.42	16.85	14.4	68.3	14.3	135.0	1030	5	3.5	16.3	82	60	65	
1337	Muttia	1931-32	11-5-32	10	10	18.3	9.0	0.8	26.7	118	107	6300	5.55	12.03	10.9	65.0	10.3	185.0	1012	4	1.2	12.2	90	68	60	
1337	Muttia	1931-32	10-5-32	12						80	100	7700	5.43	14.08	11.4	80.3	11.3	180.8	2110	4	1.2	14.0	90	67	60	
1337	Muttia	1931-32	10-5-32	11						161	178	8300	0.67	16.85	14.0	58.9	11.4	144.1	2070	5	1.0	16.5	90	60	68	
1845	Muttia	1932-33	20-8-33	10A	10	13.9	12.2	0.5	24.2	127	183	6400	5.37	12.03	9.7	75.5	9.7	214.8	2084	4	0.5	12.0	80	71	70	
1845	Muttia	1932-33	20-8-33	10B						82	202	7550	5.50	13.53	10.0	88.0	10.0	211.0	2113	4	0.2	13.1	85	74	66	
1845	Muttia	1932-33	20-8-33	12						270	187	7650	5.50	14.08	12.3	59.8	12.3	174.0	2192	5	0.5	14.0	80	72	66	
2103	Muttia	1933-34	20-3-34	10	10	10.0	12.8	0.5	27.7	36	186	6400	5.57	12.03	10.1	71.7	10.1	202.0	2040	4	0.5	12.3	81	69	71	
2103	Muttia	1933-34	20-3-34	12A						87	177	6700	5.68	13.92	11.8	55.4	12.1	108.4	2038	4	0.8	13.7	84	60	60	
2103	Muttia	1933-34	20-3-34	12B						80	188	7500	5.81	14.08	12.0	66.1	12.2	174.0	2123	4	0.5	14.5	84	60	60	
2714	Muttia	1934-35	0-1-35	10	10	13.8	10.4	0.2	24.7	18	183	6300	5.34	12.03	10.2	100.2	10.3	231.0	2356	3	0.5	12.0	82	64	60	
2714	Muttia	1934-35	10-4-35	12A						0	180	6900	5.48	13.92	12.0	81.2	12.2	109.0	2155	4	0.8	13.4	83	70	33	
2714	Muttia	1934-35	10-4-35	12B						0	187	7500	5.34	14.08	11.9	105.1	11.9	201.0	2399	4	0.5	11.2	83	70	74	
3113	Muttia	1935-36	12-3-36	10	10	17.8	9.3	0.2	25.6	9	106	6000	5.21	12.03	10.2	87.7	10.3	200.2	2155	3	1.0	12.2	83	64	60	
3113	Muttia	1935-36	10-3-36	12A						22	180	6050	5.43	13.92	12.5	55.1	12.4	182.8	2267	4	1.2	13.4	87	66	64	
3113	Muttia	1935-36	10-3-36	12B						0	184	7400	5.43	14.08	12.5	60.4	12.1	200.8	2130	4	1.0	14.1	89	60	71	

* The ring frame front roller diameter.—† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

7.—PUNJAB-AMERICAN COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
671	Punjab-American	Okara ..	1929-30
1046	"	" ..	1930-31
1352	"	Khanewal ..	1931-32
1882	"	Burewala ..	1932-33
2237	"	Khanewal ..	1933-34
2732	"	Chinchwatni	1934-35
3114	"	Phularwan ..	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36:—Same as above but spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	PUNJAB-AMERICAN.						
	1920-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white.	Creamy-white.	Creamy-white.	White to creamy-white.	White to creamy-white; bright.	White to creamy-white; bright.	White to creamy-white; bright.
Cleanliness	Somewhat leafy; a good deal stained.	Slightly stained; leafy.	Leafy; stained noticeably.	Somewhat leafy.	A little leafy.	Stained; fairly leafy.	A little leafy.
Feel	Good-bodied; slightly harsh.	Soft.	Softish.	Good.	Smooth good.	Good.	Good smooth.
Ginning and neppiness.	Fairly knotted.	Only fairly well-ginned.	Fairly well-ginned.	Well-ginned.	Well-ginned but a trifle knotted.	Fairly well-ginned.	Well-ginned.
Seeds .. ..	.....	1.75% unginned.	1.1% unginned.	.....	.....	.....	.....
Card Sliver .. ..	.....	Fairly clean.	A little leafy.	Almost clean.	Clean.	Clean.	Clean.
Card Web	Good clear.	Slightly cloudy and neppy.	Somewhat neppy.	Good.	A little neppy.	Good.	Good.
Weight of 10 flat strips.	.....	19.8 grams.	21.6 grams.	25.5 grams.	21.5 grams.	24.5 grams.	13.7 grams.
Remarks	Responded to treatment.	.....	.....	.....	.....	.....	.....

(b) Yarn :—

	PUNJAB-AMERICAN.						
	1920-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean but dull.	Fairly clean.	Clean.	Clean.	Almost clean.	Clean.
Evenness	Fairly even.	Fairly even.	Somewhat uneven.	Fairly even.	Even in the two lower counts.	Fairly even.	Even.
Neppiness	Fairly neppy.	A trifle neppy.	A little neppy.	Practically free of nep.	Free of nep.	A little neppy.	Almost nep-free
Slubbiness	A trifle slubby.	Slubby.	Slubby.	A trifle slubby.	.....	Somewhat slubby.	.....

3. *Spinning Test Details and Results* :—See Table 7 on page 21.

II. REPORT OF THE STANDARDS COMMITTEE FOR PUNJAB-AMERICAN.

PUNJAB-AMERICAN.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under ..	Fully Good Broach No. 2.	Fully Good M. Broach No. 2.	G. F.G.M.G. Broach No. 2.	F.G.M.G. Broach No. 2, July/Aug. 1933 delivery.	F.G.M.G. Broach No. 2, Hedge Contract No. 2, Apr./May 1934.	F.G.M.G. Broach No. 2, Hedge Contract No. 2, Apr./May 1935 delivery.	F.G.M.G. Broach No. 2, Hedge Contract No. 2, Apr./May 1936 delivery.
Class ..	About Superfine.	Fine.	About fully Good.	Fine.	Fine to Superfine.	Superfine.	Superfine.
Colour ..	Greyish.	Bluish white.	Dull white.	Creamy-white.	Greyish white.	White.	Creamy-white.
Staple Length ..	13/16 inch.	13/16 inch.	3/4 inch.	3/4 inch.	Barely 3/4 inch.	9/18 to 3/4 inch.	13/16 inch.
Staple Strength ..	Varied.	Weakish.	Good.	Fair.	Good.	Poor.	Good.
Regularity ..	Very irregular.	Irregular.	Somewhat irregular.	Irregular.	Irregular.	Very irregular.	Regular.
Value above or below contract rate	Par.	Rs. 10 on.	Rs. 10 on.	Rs. 10 on.	Rs. 15 on.	Rs. 10 on.	Rs. 25 on.
Basis ..	Par, fully good Broach No. 2.	Rs. 182.	Rs. 164.	F.G.M.G. Broach No. 2, July/Aug. 1933 delivery, Rs. 207.	F.G.M.G. Broach No. 2, Hedge Contract No. 2, Apr./May 1934 delivery, Rs. 197.	F.G.M.G. Broach No. 2, Hedge Contract No. 2, Apr./May 1935 delivery, Rs. 237.	F.G.M.G. Broach No. 2, Hedge Contract No. 2, Apr./May 1936 delivery, Rs. 189.
Date of Valuation ..	28-1-30.	5-5-31.	30-5-32.	20-7-33.	9-4-34.	15-4-35.	2-3-36.
Remarks ..	Heavily mixed with desi.	.....	.....	.....	.....	.....	.....

Table 7.—SPINNING TEST RESULTS FOR PUNJAB-AMERICAN COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts X-onal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.						TEMPERATURE °F.	RELATIVE HUMIDITY (%)			
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R. P. M.	Spindle Speed, R. P. M.	Draft.	Turns per inch.	Counts Actual.	Strength (lbs.).	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count-Work Product.	Evenness Class.		Neps per yard.	Turns per inch Actual.	Spinning Room.	Spiraling Room.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
671	Punjab American.	1929-30	10-2-30	20A	0	10.4	0.3	0.8	10.4	145	180	..	5.10	17.98	10.0	46.0	913	20.2	93.2	1883	4	4.2	17.2	80	62	65
"	"	"	"	20D		..	..	..	..	130	191	..	5.10	20.23	10.8	60.7	1202	20.3	100.2	2034	5	3.5	19.2	81	63	65
1013	Punjab American.	1930-31	9-3-31	16	10	11.7	11.1	0.6	21.9	60	164	9000	5.32	15.97	15.7	66.5	1044	19.2	139.0	9252	3	1.5	15.5	90	67	69
"	"	"	11-5-31	20A		..	..	..	..	110	170	8700	6.05	17.98	20.0	40.0	800	20.3	103.8	2107	4	2.2	17.3	90	65	68
"	"	"	"	20B		..	..	..	..	70	168	10700	6.05	20.23	19.9	54.1	1077	20.2	105.5	2133	5	2.5	19.5	89	66	67
1332	Punjab American.	1931-32	6-6-32	16	10	11.7	11.5	0.6	22.3	16	192	8350	5.10	15.97	15.9	82.8	1308	15.7	182.0	2867	4	2.2	15.5	91	65	68
"	"	"	7-6-32	20		..	..	..	..	105	189	9200	6.38	17.98	20.2	51.0	1048	20.4	112.4	2293	5	2.0	17.4	90	66	70
1492	Punjab American.	1932-33	18-8-33	16	10	8.8	13.5	0.5	21.5	218	180	8000	6.11	15.97	15.3	63.1	697	15.5	170.0	2635	4	1.2	15.4	86	73	70
"	"	"	19-8-33	20		..	..	..	..	223	170	8300	5.68	17.98	20.1	37.8	760	19.8	112.0	2218	5	1.6	17.0	87	68	70
2237	Punjab American.	1933-34	19-4-34	16	10	7.5	10.7	0.6	17.9	24	198	8700	5.32	15.97	16.1	85.7	1371	15.8	188.2	2974	4	0.8	15.3	87	66	68
"	"	"	19-4-34	20		..	..	..	..	57	188	9200	5.10	17.98	16.3	70.1	1353	19.5	140.4	2738	4	0.8	17.1	87	65	68
"	"	"	"	24		..	..	..	..	89	170	9500	6.25	20.74	24.3	51.4	1249	24.6	99.5	2450	6	1.0	19.8	87	67	68
2732	Punjab American.	1934-35	12-6-35	12	10	7.8	11.8	0.5	19.1	73	174	6300	4.32	13.92	12.4	66.8	704	12.2	191.0	2367	4	1.0	13.1	90	69	70
"	"	"	5-6-35	16A		..	..	..	..	55	160	7100	5.54	15.97	15.9	38.0	607	15.7	122.8	1928	4	1.2	15.1	90	66	67
"	"	"	4-6-35	16B		..	..	..	..	48	170	8700	5.70	17.98	16.8	45.8	769	16.5	127.6	2105	4	1.0	13.9	90	67	68
3114	Punjab American.	1935-36	12-2-36	16	10	8.6	10.0	0.3	18.0	0	187	8650	5.55	15.97	16.1	102.1	1644	16.0	204.0	3294	3	1.0	15.5	81	62	60
"	"	"	"	20		..	..	..	..	10	190	9350	5.31	17.98	20.0	76.3	1539	19.9	141.6	2818	3	1.0	17.5	80	60	62
"	"	"	"	24		..	..	..	..	27	171	9300	6.34	19.73	21.1	68.2	1403	23.6	115.5	2728	4	1.2	19.0	82	62	72

* Diameter of ring frame front roller—F. Diameter of rings—14".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

The performance of the 1934-35 sample is much below the average for this cotton.

8.—BROACH COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
729	Broach	Broach	1929-30.
1023	"	"	1930-31.
1351	"	Miyagam	1931-32.
1782	"	Dabhoi	1932-33.
2235	"	Palej	1933-34.
2731	"	Broach	1934-35.
3263	"	Palej	1935-36.

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35. and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1. possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

	BROACH.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white.	White to creamy-white.	White to creamy-white; brightish.	Creamy white; bright.	White to creamy-white; bright.	White; brightish.	White to creamy-white.
Cleanliness	Clean; fairly bright.	Fairly clean; an occasional stain; very bright.	Fairly clean.	Clean.	Clean.	Fairly clean.	Fairly clean.
Feel	Good.	Good-bodied.	Good-bodied.	Good.	Smooth and bodied.	Good.	Softish.
Ginning and Neppiness ..	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	1.75% unginned.	..	1% unginned.	2.2% unginned.	..	..	..
Card sliver	Clean.	Clean.	Almost clean.	Clean.	Clean.	Almost clean.	Clean.
Card web	Clean.	Very good.	Good.	Even and nep-free.	Good.	Good.	Good.
Weight of ten flat strips ..	15.6 grams.	13.7 grams	16.2 grams.	15.4 grams.	10.9 grams.	21.9 grams.	18.8 grams.
Remarks .. .. .	..	..	..	..	..	..	..

(b) *Yarn* :—

	BROACH.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean. ..	Clean. ..	Clean. ..	Clean. ..	Fairly clean. ..	Almost clean ..	A little leafy.
Evenness	Fairly even ..	Fairly even ..	Even ..	Even ..	Fairly even ..	Even ..	Fairly even.
Neppiness	Fairly free of nep.	Some what neppy.	A trifle neppy.	Free of nep.	Almost free of nep.	A little neppy.	Almost free of nep.
Slubbiness .. .. .	..	A trifle slubby.	..	..	..	A little slubby.	Slightly slubby.

2. *Spinning Test Details and Results*.—See Table 8 on page 24.

Table 8.—SPINNING TEST RESULTS FOR BROACH COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	RELATIVE HUMIDITY. (%)	TEMPERATURE. (°F.)	YARN TEST RESULTS.																			
																													WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				L.S.A.						BALISTIC.					
																													Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed in. p. m.	Spindle Speed in. p. m.	Draft.	Turns per Inch.	Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.	Twist Class.	Neps per yard.	Turns per Inch Actual.	Spinning Room.	Testing Room.
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample, lbs.																																											
729	Broach ..	1920-30	12-5-30	16	10	6.6	8.6	0.5	13.0	57	182	..	5.20	15.97	15.7	53.5	871.	15.8	117.8	1861	4	1.5	15.2	90	62	60																						
729	Broach ..	1920-30	12-5-30	20	10	..	..	..	..	50	148	..	6.54	20.23	20.0	50.8	1016	20.0	90.0	1800	5	2.0	19.1	92	60	61																		
1023	Broach ..	1930-31	15-4-31	16A	10	8.3	9.2	0.6	17.2	53	188	8400	5.26	15.97	15.9	57.9	921	15.9	122.4	1940	3	2.0	15.5	91	68	67																						
1023	Broach ..	1930-31	15-4-31	16B	10	..	..	..	..	27	192	9600	5.26	18.10	15.9	76.2	1259	15.5	143.2	2220	4	1.7	17.4	90	65	69																		
1023	Broach ..	1930-31	15-4-31	20	10	..	..	..	..	75	170	9450	6.38	20.23	20.5	50.0	1025	20.4	95.6	1950	5	2.2	19.5	89	65	67																		
1351	Broach ..	1931-32	6-6-32	12	10	6.9	8.9	0.6	15.6	58	206	7800	4.15	13.92	12.2	92.5	1128	12.3	211.0	2003	3	2.5	13.3	90	68	68																						
1351	Broach ..	1931-32	6-6-32	16	10	..	..	..	..	83	186	8000	5.32	15.97	16.0	57.9	926	16.2	126.8	2054	4	2.0	15.3	90	65	66																		
1782	Broach ..	1932-33	20-5-33	12	10	7.5	8.9	0.4	16.0	51	208	7800	5.00	13.92	12.7	90.5	1226	12.6	207.6	2016	3	1.0	13.4	90	66	68																						
1782	Broach ..	1932-33	20-5-33	16	10	..	..	..	..	42	177	7800	5.31	15.97	15.9	71.0	1143	16.4	155.6	2532	4	1.5	15.5	90	67	70																		
2235	Broach ..	1933-34	10-4-34	12	10	6.2	10.0	0.5	16.0	7	208	7000	4.90	13.92	12.3	90.4	1223	12.2	216.0	2035	3	1.0	13.3	89	68	66																						
2235	Broach ..	1933-34	17-4-34	16	10	..	..	..	..	91	180	7350	5.21	15.97	16.3	66.3	1081	16.1	137.2	2209	4	1.0	16.1	88	70	68																		
2731	Broach ..	1934-35	5-6-35	12	10	6.6	11.3	0.3	17.4	29	188	7200	5.13	13.92	12.1	90.0	1198	12.2	207.2	2528	3	1.8	13.4	88	66	65																						
2731	Broach ..	1934-35	4-6-35	16A	10	..	..	..	..	24	174	7600	5.76	15.97	16.2	57.4	930	16.0	136.4	2562	3	1.0	15.4	89	67	65																		
2731	Broach ..	1934-35	4-6-35	16B	10	..	..	..	..	24	184	9000	5.89	17.08	16.0	60.0	1166	16.5	158.8	2620	3	1.2	17.1	89	67	66																		
3263	Broach ..	1935-36	6-7-36	12	10	7.2	10.2	0.5	17.0	58	194	7450	5.44	13.92	12.0	78.8	946	12.1	101.2	2314	4	1.2	13.5	87	71	70																						
3263	Broach ..	1935-36	6-7-36	16A	10	..	..	..	..	91	180	8000	5.67	15.97	15.8	53.1	839	15.6	130.6	2037	4	0.8	16.4	87	74	72																		
3263	Broach ..	1935-36	4-7-36	16B	10	..	..	..	..	42	192	9300	5.78	17.08	16.1	72.5	1167	16.2	133.6	2161	5	1.0	17.3	85	77	69																		

* Diameter of ring frame front roller—7/8". Diameter of rings—1 5/8".

† It is to be noted that the total loss is for a small sample spun under mill conditions it would be less than shown here.

9.—JAGADIA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
730	Jagadia.	Jagadia.	1929-30.	2296	Jagadia.	Jagadia.	1933-34.
1047	"	"	1930-31.	2733	"	"	1934-35.
1355	"	"	1931-32.	3262	"	"	1935-36.
1786	"	"	1932-33.				

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room.*—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room.*—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	JAGADIA.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy white; bright.	White to creamy white; bright.	White; bright.	White; brightish.	White to creamy white; bright.	White; brightish.	White to creamy white; brightish.
Cleanliness .. .	Fairly clean.	Fairly clean.	Somewhat leafy.	Fairly clean.	Fairly clean.	A little stained; fairly clean.	Fairly leafy.
Feel .. .	Bodied and silky.	Good silky.	Good soft.	Good softish.	Good soft.	Good.	Good smooth.
Ginning and neppiness ..	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds .. .	Occasional out seed.	..	1.5% unginned.	..	..	..	..
Card sliver .. .	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Card web .. .	Clear and even.	Good.	Good.	Even and nep-free.	Full and free of nep.	Web good.	Even; nep-free
Weight of ten flat strips ..	12.2 grams.	10.5 grams.	13.2 grams.	14.9 grams.	15.9 grams.	16.3 grams.	10.5 grams.
Remarks .. .	A very good commercial sample.	..	..	..	..	..	..

(b) Yarn :—

	JAGADIA.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness .. .	Clean.	Clean.	Clean.	Clean.	Clean.	Fairly clean.	A little leafy.
Evenness .. .	Fairly even.	Even.	Even.	Fairly even.	Even.	Even.	Even.
Neppiness .. .	Fairly free of nep.	Fairly free of nep.	Almost free of nep.	Almost nep-free	Almost free of nep.	Fairly free of nep.	Practically free of nep.
Slubbiness .. .	..	..	..	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 9 on page 27.

II. REPORT OF THE STANDARDS COMMITTEE FOR JAGADIA COTTON.

JAGADIA.							
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
		1935-36.					
Contract valued under	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.
	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.
Class
Colour
Staple Length
Staple Strength
Regularity
Value above or below contract rate
Basis
Date of valuation
Remarks

TABLE 9.—SPINNING TEST RESULTS FOR JAGADIA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*							YARN TEST RESULTS.										TENSILE STRENGTH (%).	RELATIVE HUMIDITY (%).
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	L.S.A.			DRAUGHT.			Keps per yard.	Turns per inch Actual.	Spiraling Room.	Tensile Strength (%).				
															Counts Actual.	Strength (lbs.)	Count-strength product.	Counts Actual.	Work of Rupture (inch-lbs.)	Count-Work Product.								
730	Jagadia ..	1929-30	12-5-30	24	10	8.3	7.8	0.7	10.1	8	173	..	7.35	10.73	24.0	61.4	1474	23.0	88.4	2113	3	2.7	10.0	90	05	05	02	
730	Jagadia ..	1929-30	12-5-30	30		..	..	..	..	63	158	..	0.64	21.86	30.5	38.0	1150	30.5	55.2	1084	5	2.2	21.1	91	02	01
1017	Jagadia ..	1930-31	11-5-31	20	10	8.3	8.0	0.5	10.0	34	190	9800	6.41	17.98	10.9	77.4	1540	20.5	113.2	2321	3	1.7	17.4	90	03	07		
1017	Jagadia ..	1930-31	12-6-31	24		..	..	..	..	9	178	9800	6.50	19.73	24.1	61.0	1470	24.4	97.2	2372	4	1.5	19.1	90	05	07
1017	Jagadia ..	1930-31	12-5-31	30		..	..	..	..	23	150	9800	7.88	23.11	29.8	45.4	1353	30.3	70.4	2106	5	2.0	22.2	89	03	09
1355	Jagadia ..	1931-32	0-4-32	20	10	8.0	7.5	0.6	15.3	50	194	9500	5.95	17.98	20.0	70.0	1592	20.2	120.4	2553	3	1.2	17.4	91	07	06		
1355	Jagadia ..	1931-32	0-4-32	24		..	..	..	..	24	177	9350	7.14	19.73	24.1	50.3	1429	24.1	101.0	2449	4	1.2	19.0	92	06	06
1355	Jagadia ..	1931-32	8-6-32	30		..	..	..	..	40	100	9000	7.00	21.86	29.2	47.1	1375	29.8	84.6	2521	4	1.8	21.3	91	06	06
1766	Jagadia ..	1932-33	1-6-33	24	0	8.0	8.8	0.5	16.5	41	180	9650	5.54	19.73	23.9	63.2	1510	23.7	108.8	2579	4	1.2	19.1	89	08	70		
1766	Jagadia ..	1932-33	1-6-33	30		..	..	..	..	122	158	9400	6.71	21.86	29.8	40.4	1383	30.3	82.4	2497	6	2.0	21.3	91	08	70
2296	Jagadia ..	1933-34	22-5-34	20	10	6.6	8.5	0.3	14.8	16	193	9750	5.85	17.98	20.2	88.8	1704	20.6	128.8	2653	3	1.8	17.3	90	08	69		
2296	Jagadia ..	1933-34	22-5-34	24		..	..	..	..	0	180	9300	5.45	19.73	23.9	72.0	1735	24.2	111.8	2703	4	1.8	19.1	90	08	63
2296	Jagadia ..	1933-34	23-5-34	30		..	..	..	..	20	159	9500	6.71	21.86	29.5	53.6	1581	29.9	88.4	2643	5	1.5	21.2	88	08	70
2723	Jagadia ..	1934-35	5-6-35	20	10	7.5	8.3	0.4	25.0	10	292	9200	5.95	27.99	20.5	75.5	1519	20.5	129.0	2595	3	1.8	17.1	89	06	66		
2733	Jagadia ..	1934-35	8-6-35	24		..	..	..	..	36	176	9700	5.33	19.73	24.0	64.0	1590	24.3	108.2	2620	3	1.5	18.0	90	07	63
2733	Jagadia ..	1934-35	8-6-35	30		..	..	..	..	17	142	8300	6.97	21.86	29.1	48.9	1423	29.7	80.4	2655	5	2.0	21.3	89	08	63
3292	Jagadia ..	1935-36	3-7-36	20	10	7.5	8.8	0.3	15.0	6	190	9550	5.95	17.98	20.1	88.1	1771	20.2	128.0	2598	3	1.0	17.2	86	77	63		
3292	Jagadia ..	1935-36	3-7-36	24		..	..	..	..	9	171	9600	5.55	19.73	23.9	70.0	1073	23.9	106.4	2543	4	1.5	18.8	87	76	63
3292	Jagadia ..	1935-36	4-7-36	30		..	..	..	..	20	152	9550	6.94	21.86	29.7	49.7	1470	30.2	83.0	2507	4	1.0	20.8	87	73	70

* Diameter of ring frame front roller—7/8". Diameter of rings—1 5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for a bulk sample spun under mill conditions it would be less than shown here.

10.—SURAT COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
731	Surat.	Surat.	1929-30.
1022	Surat.	Surat.	1930-31.
1353	Surat.	Kosamba.	1931-32.
1783	Surat.	Surat.	1932-33.
2236	Surat.	Surat.	1933-34.
2837	Surat.	Surat.	1934-35.
3163	Surat.	Surat.	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	SURAT.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White; bright.	White to creamy-white.	White; brightish.	Creamy-white; bright.	White to creamy-white; bright.	White to creamy-white; bright.	White; bright.
Cleanliness	Fairly clean; a trifle stained.	Fairly clean; very bright.	Somewhat leafy.	Fairly clean.	Clean.	Fairly leafy.	Clean.
Feel	Good silky.	Very soft.	Soft silky.	Good smooth.	Good soft.	Good.	Smooth and bodied.
Ginning and Neppiness ..	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Fairly well-ginned.	Well-ginned.
Seeds .. ..	..	..	..	..	1% unginned.	Good amount of unginned seeds.	..
Card Sliver	Clean.	Clean.	Almost clean.	Almost clean.	Clean.	A little leafy.	Clean.
Card Web	Even and clear.	Very good.	Fairly good.	Even and nep-free.	Good.	Full.	Even and nep-free.
Weight of ten flat strips ..	13.7 grams.	11.0 grams.	14.3 grams.	15.1 grams.	14.7 grams.	18.1 grams.	12.3 grams.
Remarks	A very desirable cotton.	..	..	..	..	..	..

(b) Yarn :—

	SURAT.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Fairly clean.	Clean.	Clean.	Clean.	Clean.	Almost clean.
Evenness	Fairly even.	Even.	Even.	Fairly even.	Fairly even.	Even.	Even.
Neppiness	A little neppy.	Practically free of nep.	Almost free of nep.	Free of nep.	Fairly free of nep.	A little neppy.	Free of nep.
Slubbiness .. ..	..	..	..	..	..	Occasionally slubby.	..

3. Spinning Test Details and Results :—See Table 10 on page 30.

SUMMARY.									
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.		
Contract valued under	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, April/May 1933.	F. G. M. G. Broach No. 2, April/May 1934.	F. G. M. G. Broach No. 2, July/August 1935 delivery.	F. G. M. G. Broach No. 2, April/May 1936 delivery.		
Class	Fine.	Fine.	Fine.	Fine to Superfine.	Fine.	Fine to Superfine.		
Colour	White.	White.	White but slightly creamy.	White.	Whitish.	White.		
Staple Length	Full 15/16".	7/8".	15/16".	7/8".	7/8".	15/16".		
Staple Strength	Fairly good.	Fair.	Fair.	Good.	Fair.	Good.		
Regularity	Regular.	Fair.	Irregular.	Regular.	Fair.	Slightly irregular.		
Value above or below contract rate.	Rs. 75 on.	Rs. 50 on.	Rs. 40 on.	Rs. 70 on.	Rs. 60 on.	Rs. 60 on.		
Basic	Rs. 201.	Rs. 164.	F. G. M. G. Broach No. 2, April/May 1933 delivery Rs. 202.	F. G. M. G. Broach No. 2, April/May 1934 delivery Rs. 197.	F. G. M. G. Broach No. 2, July/August 1935 delivery Rs. 224.	F. G. M. G. Broach No. 2, April/May 1936 delivery Rs. 203.		
Date of Valuation	1-4-31.	30-5-32.	24-5-33.	9-4-34.	20-8-35.	23-4-36.		
Remarks		

Table 10.—SPINNING TEST RESULTS FOR SURAT COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Sample No.	Cotton.	Season.	Date of Spinning	Counts Nominal.	Weight of Samples, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						LEA.			YARN TEST RESULTS.						TEMPERATURE-ATMOSPHERIC (°F.)	RELATIVE HUMIDITY %	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed ft. p.m.	Spindle Speed ft. p.m.	Draft.	Turns per inch.	Counts Actual.	Strength lbs.	Count Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count Product.	Evenness Class.	Nepe per yard.	Turns per inch Actual.	Spinning Room.		Spinning Room.	Testing Room.
731	Surat	1929-30	13-5-30	24	10	7.0	7.7	0.2	14.4	12	172	..	8.00	19.73	23.8	56.3	1340	24.3	82.2	1097	1	2.5	18.6	91	91	91	91
731	Surat	1929-30	14-5-30	30		..	..	..	..	30	155	..	9.29	24.52	30.2	43.2	1305	31.1	50.4	1847	6	3.0	23.6	80	80	80	80
1022	Surat	1930-31	14-4-31	24	10	7.0	7.5	0.5	14.5	0	180	9700	6.19	19.73	23.8	62.4	1485	25.0	101.8	2402	3	1.2	18.8	90	90	90	90
1022	Surat	1930-31	14-4-31	30		..	..	..	..	20	160	10800	8.03	24.33	30.4	13.4	1319	31.0	70.0	2468	4	1.7	23.5	91	91	91	91
1353	Surat	1931-32	7-6-32	20	10	8.0	8.2	0.6	15.9	0	195	9650	5.95	17.98	20.2	73.2	1479	20.1	116.8	2348	3	1.2	17.3	90	90	90	90
1353	Surat	1931-32	7-6-32	24		..	..	..	..	32	178	9550	7.00	10.73	24.1	57.6	1388	23.7	94.2	2233	4	1.8	19.1	91	91	91	91
1353	Surat	1931-32	8-6-32	30		..	..	..	..	53	159	9500	6.91	21.86	20.6	42.2	1240	20.3	78.0	2296	1	2.0	21.2	91	91	91	91
1783	Surat	1932-33	30-5-33	20	10	7.2	8.2	0.5	15.2	114	195	9700	5.08	17.98	20.1	71.2	1431	20.1	125.2	2317	1	1.0	17.2	90	90	90	90
1783	Surat	1932-33	30-5-33	24		..	..	..	..	118	178	9650	6.22	10.73	24.0	51.8	1315	23.0	102.2	2443	5	1.2	18.8	91	91	91	91
2236	Surat	1933-34	17-4-34	20	10	6.6	7.8	0.5	14.3	5	199	9850	5.93	17.98	20.5	89.7	1839	20.7	130.8	2708	3	1.5	17.3	88	88	88	88
2236	Surat	1933-34	17-4-34	24		..	..	..	..	27	182	9800	5.43	10.73	24.4	72.8	1770	23.1	109.8	2981	4	1.2	19.1	89	89	89	89
2236	Surat	1933-34	18-4-34	30		..	..	..	..	30	160	9500	0.79	21.86	30.8	50.1	1513	31.6	86.2	2724	5	1.5	21.1	88	88	88	88
2236	Surat	1933-34	19-4-34	40		..	..	..	..	38	140	9500	0.00	25.23	40.8	32.4	1322	40.4	66.0	2966	6	1.8	24.4	87	87	87	87
2837	Surat	1934-35	29-8-35	20	10	8.1	9.5	0.3	17.1	5	195	9500	5.83	17.98	20.2	100.0	2020	20.1	143.6	2886	3	2.2	17.1	84	84	84	84
2837	Surat	1934-35	30-8-35	30		..	..	..	..	7	100	9550	0.47	21.86	28.9	58.6	1694	20.1	91.8	2971	4	2.0	20.9	84	84	84	84
2837	Surat	1934-35	30-8-35	40		..	..	..	..	29	140	9600	8.83	25.23	40.7	32.7	1331	40.5	65.0	2957	5	1.8	24.1	85	85	85	85
3163	Surat	1935-36	4-5-36	20	10	3.4	7.9	0.2	10.4	0	194	9700	5.95	17.98	20.1	70.7	1395	20.6	110.0	2451	3	0.5	17.5	89	89	89	89
3163	Surat	1935-36	2-5-36	24		..	..	..	..	14	178	9650	5.33	19.73	21.1	62.0	1494	24.4	101.2	2542	4	1.0	19.1	89	89	89	89
3163	Surat	1935-36	1-5-36	30		..	..	..	..	36	118	8900	6.41	21.86	30.9	37.7	1165	31.3	80.4	2517	5	0.8	21.1	89	89	89	89

* Diameter of ring frame front roller—17". Diameter of rings—14".

† It is to be noted that the total loss is for a "vital sample weighing 10 lbs." for bulk sample spun under mill conditions it would be less than shown here.

11.—NAVSARI COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.		Cotton.	Place.	Season.	Sample No.		Cotton.	Place.	Season.
732	..	Navsari.	Navsari.	1929-30.	2435	..	Navsari.	Navsari.	1933-34.
1048	..	"	"	1930-31.	2828	..	"	"	1934-35.
1354	..	"	"	1931-32.	3162	..	"	"	1935-36.
1784	..	"	"	1932-33.					

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room.*—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room.*—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	NAVSARI.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White; very bright.	White to Creamy-white; bright.	White; bright.	White to Creamy-white; bright.	White; bright.	White; bright.	White; bright.
Cleanliness	A trifle leafy.	Clean to fairly clean.	Fairly clean.	Fairly clean.	Clean.	Clean.	Clean.
Feel	Soft and silky.	Silky and bodied.	Very good.	Silky and bodied.	Smooth bodied.	Good.	Smooth and bodied.
Ginning and Neppiness ..	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Fairly well-ginned.	Well-ginned.	Well-ginned.
Seeds	1.25% unginned.	..	..	..	..	..	..
Card Sliver	Clean.	Clean.	Clean.	Clean.	Clean.	Soft; clean.	Clean.
Card Web	Clear and even.	Very good.	Good.	Even and nep-free.	Full.	Full.	Even and Nep-free.
Weight of ten flat strips ..	13.3 grams.	8.1 grams; very light.	13.5 grams.	13.5 grams.	20.7 grams.	19.0 grams.	13.3 grams.
Remarks .. .. .	..	A very desirable cotton.	..	..	..	..	..

(b) Yarn :—

	NAVSARI.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.	Clean.	A little leafy.	Clean.	Clean.
Evenness	Somewhat uneven.	Even.	Even.	Fairly even.	Fairly even.	Even.	Very even.
Neppiness	Neppy.	Fairly free of nep.	Almost free of nep.	Free of nep.	Fairly free of nep.	A trifle neppy.	Nep-free.
Slubbiness .. .. .	..	..	..	..	..	..	..

3. Spinning Test Details and Results :—See Table 11 on page 33.

II.—REPORT OF THE STANDARDS COMMITTEE FOR NAVSARI COTTON.

32

NAVSARI.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
		1934-35.	1935-36.			
Contract valued under	.. ..	F. G. M. G. Branch. No. 2.	F. G. M. G. Branch. No. 2.	F. G. M. G. Branch. No. 2.	F. G. M. G. Branch. No. 2.	F. G. M. G. Branch. No. 2.
Class .. ..	.. ..	Superfine.	Superfine.	Fine to superfine.	Fine to superfine.	Fine.
Colour .. ..	.. ..	White.	Creamy-white.	White but slightly creamy.	White but slightly creamy.	Creamy-white.
Staple Length ..	.. ..	Full inch.	15/16 inch.	31/32 inch.	31/32 inch.	15/16 inch.
Staple Strength ..	.. ..	Fair.	Fairly good.	Good.	Good.	Fair.
Regularity .. ..	.. ..	Fair.	Fairly regular.	Regular.	Regular.	Slightly irregular.
Value above or below Contract rate	.. ..	Rs. 105 on.	Rs. 85 on.	Rs. 60 on.	Rs. 55 on.	Rs. 75 on.
Basis .. ..	.. ..	Rs. 252.	Rs. 182.	Rs. 164.	F. G. M. G. Branch. No. 2, April/May 1933 delivery Rs. 202.	F. G. M. G. Branch. No. 2, July/ August 1935 delivery Rs. 224.
Date of valuation	.. ..	29-4-30.	5-5-31.	30-5-32.	24-5-33.	31-7-34.
Remarks .. ..	.. ..	....	....	....	....	....
	.. ..	23-4-36.	13-8-35.	....	....	....

F. G. M. G. Branch.
Hedge Contract No. 2.
April/May 1936 delivery.
Barely superfine.
White.
31/32 inch.
Good.
Regular.
Rs. 60 on.
F. G. M. G. Branch.
H. Contract No. 2.
April/May 1934 delivery
very Rs. 203.
23-4-36.
....

Table 11.—SPINNING TEST RESULTS FOR NAVSARI COTTON.

33

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAMED PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).		
				Blow Loom Loss.	Card Loom Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 Spindles per hour.	Front Roller Speed R.P.M.	Spindles Speed R.P.M.	Draft.	Turns per inch.	LEA			BALISTO.			Evenness Class.	Keps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.				
													Counts Actual.	Strength (lbs.).	Count-Strngth Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count-work Product.									
772	Navari ..	1929-30	13-5-30	24	10	7.0	8.0	0.7	15.1	68	172	..	8.50	19.73	24.3	55.4	1346	24.3	80.4	1954	4	4.2	18.8	91	60		
772	Navari ..	1929-30	14-5-30	300	..	..	..	..	..	47	155	..	8.97	24.52	31.3	42.0	1281	31.3	58.4	1828	6	4.5	23.5	89	61		
1018	Navari ..	1930-31	11-5-31	20	81	6.6	7.2	0.4	13.7	0	196	9800	6.41	17.98	20.1	72.5	1457	20.2	117.2	2207	3	1.2	17.5	90	68		
1018	Navari ..	1930-31	12-5-31	24	..	..	..	..	..	0	178	9800	6.38	19.73	24.0	54.0	1296	24.1	98.2	2367	4	1.5	19.1	90	65		
1018	Navari ..	1930-31	12-5-31	30B	..	..	..	..	..	27	156	9800	7.65	23.11	29.1	44.7	1301	20.7	81.0	2400	5	2.0	22.4	89	69		
1351	Navari ..	1931-32	7-6-32	20	..	5.5	7.7	0.4	13.1	0	195	9650	6.98	17.98	10.8	78.8	1560	10.8	135.0	2085	3	1.8	17.4	90	69		
1351	Navari ..	1931-32	7-6-32	24	..	..	..	..	..	82	178	9560	7.00	19.73	24.2	57.7	1396	24.6	99.4	2445	4	2.0	19.2	91	65		
1351	Navari ..	1931-32	8-6-32	30A	..	..	..	..	..	40	150	9500	6.94	21.86	28.4	48.0	1363	28.2	87.0	2453	5	2.0	21.4	91	67		
1781	Navari ..	1932-33	30-5-33	24	0	0.2	6.0	0.4	14.1	73	178	9650	5.58	19.73	24.0	62.5	1500	23.7	104.4	2474	4	1.0	10.0	91	68		
1781	Navari ..	1932-33	31-5-33	30A	..	..	..	..	..	60	154	9650	7.00	21.86	30.0	44.2	1320	20.7	84.2	2501	4	1.0	20.9	91	66		
2135	Navari ..	1933-34	9-8-34	29	10	5.6	10.4	0.3	15.6	0	197	9550	6.59	17.06	20.6	85.0	1763	20.3	131.4	2687	3	2.8	17.2	84	80		
2135	Navari ..	1933-34	9-8-34	30A	..	..	..	..	..	10	192	9500	6.58	21.86	30.0	49.1	1473	29.4	88.2	2593	5	2.5	21.0	84	80		
2135	Navari ..	1933-34	9-8-34	34	..	..	..	..	..	38	146	9050	7.42	23.26	33.4	40.4	1349	33.1	78.8	2608	6	2.5	22.4	84	80		
2928	Navari ..	1934-35	26-8-35	20	10	5.9	10.0	0.5	15.8	16	196	9500	5.95	17.98	20.7	86.5	1791	20.7	131.8	2790	3	2.5	17.0	86	69		
2928	Navari ..	1934-35	24-8-35	24	..	..	..	..	..	5	178	9700	5.29	19.73	23.6	70.2	1768	23.8	110.0	2775	3	2.0	19.0	85	72		
2928	Navari ..	1934-35	24-8-35	30A	..	..	..	..	..	30	157	9500	6.71	21.86	31.2	48.5	1513	31.5	85.4	2900	4	2.0	20.7	86	71		
3162	Navari ..	1935-36	30-4-36	20	10	3.3	7.1	0.3	10.4	5	195	9600	5.85	17.98	20.0	83.8	1716	10.9	125.2	2491	3	0.5	17.2	89	69		
3162	Navari ..	1935-36	30-4-36	24	..	..	..	..	..	27	178	9700	5.43	19.73	24.3	63.5	1543	24.1	104.6	2521	3	0.8	16.1	89	71		
3162	Navari ..	1935-36	1-5-36	30	..	..	..	..	..	28	150	8000	6.41	21.86	29.5	49.3	1454	29.6	85.8	2540	4	0.5	21.0	89	68		

* Diameter of ring frame front roller—1½". Diameter of ring 14".
† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

12.—DHOLLERAS COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
724	Dholleras (Fine) Vagadia	Wadhwan	1929-30.
725	Dholleras (Superfine) Vagadia	"	1929-30.
1126	Dhollera Vagadia	"	1930-31.
1368	" "	Limbdi	1931-32.
1886	" "	Kadi	1932-33.
2357	" "	Wadhwan	1933-34.
2830	" "	Manavadar	1934-35.
3231	" "	Bawla	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

DHOLLERAS.								
Season.	1929-30. (Fine)	1929-30. (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white.	Dullish white.	Creamy-white.	Dallish white.	White to creamy-white; brightish.	White to creamy-white; fairly bright.	Dullish creamy-white.	White to creamy-white bright.
Cleanliness ..	Very leafy (sand like leaf); a good deal stained.	Leafy; slightly stained.	Leafy; occasional spot of stain.	Leafy.	Somewhat leafy.	Very leafy with occasional stains.	Stained; leafy.	Fairly leafy.
Feel .. ..	..	Better feel than Fine Dholleras.	Somewhat soft.	Good.	Good.	Good.	Fairly good.	Good bodied.
Ginning and neppiness	Fairly well-ginned.	Fairly well-ginned.	Fairly well-ginned.	Well-ginned.	..	Well-ginned.	Somewhat knotted.	Well-ginned.
Seeds	Occasional cut; a fair amount of unripe fibre and 2 per cent. seeds—mostly unginned.	..	1.5% unginned.	2.1% ginned and unginned.	2% partly ginned.	3.75% unginned (kapas).	..	..
Card Sliver ..	Clear.	Clear.	A little leafy.	Almost clean.	Clean.	Fairly clean.	Almost clean.	Almost clean.
Card Web	Clear.	Clear.	Even and practically napp-free.	Good.	Even and napp-free.	Good.	Good.	Good.
Weight of 10 flatstrips	16.3 grams.	..	21.2 grams.	13.5 grams.	18.0 grams.	20.2 grams.	24.6 grams.	15.4 grams.
Remarks	A poor, wasty sample.	Staple fine for its length but irregular in length and strength.	Fully pressed.	Fully pressed.	..	..	..	..

(b) *Yarn* :—

DHOLLERAS.								
Season.	1929-30. (Fine.)	1929-30 (Superfine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean	Clean	Fairly clean	Clean	Clean	Clean	Fairly clean	Almost clean.
Evenness	Fairly even	Somewhat uneven.	Fairly even	Even	Even	Even	Even	Even.
Neppiness	A little nappy.	A little nappy.	Fairly nappy.	Free of napp	Free of napp	Slightly nappy.	Almost free of napp.	Practically free of napp.
Slubbiness	Slubby	Slubby	..	..	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 12 on page 36.

II.—REPORT OF THE STANDARDS COMMITTEE FOR DHOLLERAS COTTON.

DHOLLERAS.									
	1929-30 (Fine.)	1929-30 (Superfine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	F. G. M. G. Broach	F. G. M. G. Broach	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, July/August 1933 delivery.	F. G. M. G. Broach H. C. No. 2, July/ August 1934.	F. G. M. G. Broach H. C. No. 2, July/ August 1935 deli- vary.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery.	
Class	Fine	Strict superfine	Fine	Fine to superfine	Superfine	Fully good to fine	About fine	Superfine.	
Colour	Silvery	Silvery	Bluish white	Bluish white	White	White	Creamy	White.	
Staple Length	5/8-7/8 inch	7/8 inch	Barley 3/4 inch	13/16 inch	13/16 inch	13/16 inch	3/4 inch	13/16 inch.	
Staple Strength	Poor	Fair	Weak	Good	Good	Good	Fair	Good.	
Regularity	Irregular	Fair	Irregular	Regular	Regular	Regular	Fair	Slightly irregular.	
Value above or below contract rate	Par	Rs. 7 on	Par	Rs. 7 on	Rs. 7 on	Rs. 5 on	Par	Rs. 5 on.	
Basis	Rs. 255	Rs. 255	Rs. 177	Rs. 152	F. G. M. G. Broach No. 2, July/August 1933 delivery Rs. 207.	F. G. M. G. Broach H. C. No. 2, July/ August 1934 delivery Rs. 208.	F. G. M. G. Broach H. C. No. 2, July/ August 1935 delivery Rs. 224.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery Rs. 197.	
Date of Valuation	20-4-30	29-4-30	14-7-31	13-6-32	28-7-33	19-6-34	13-8-35	5-5-36.	
Remarks	This year poor charac- ter.	This year poor charac- ter.							

Table 12.—SPINNING TEST RESULTS FOR DHOLLERAS COTTON.

36

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE AND HUMIDITY (%).	
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	LEA.			BALISTIC.			Reverses Class.	Neps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.	Relative Humidity (%).
												Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.						
724	Dhollera	1929-30	7-5-30	10.6	10.0	0.7	21.3	50	160	..	6.76	17.98	19.8	48.9	968	10.8	88.8	1719	4	3.0	17.1	90	64
724	(Fino)	1929-30	7-5-30	..	..	..	..	10	172	..	6.76	20.23	19.5	57.3	1117	19.6	94.27	1846	5	3.5	10.1	90	64
725	Dhollera	1929-30	7-5-30	14.1	9.0	0.9	24.0	70	160	..	6.76	17.08	20.3	41.3	838	20.4	118.2	1607	5	2.5	17.2	80	64
725	(Superfine)	1929-30	7-5-30	..	..	..	..	45	172	..	6.76	20.23	20.0	53.8	1070	20.2	87.0	1767	5	3.7	19.3	90	65
1126	Dhollera.	1930-31	24-7-31	14.2	11.8	0.6	26.6	40	193	8800	5.78	15.97	15.8	76.4	1207	16.3	129.0	2103	3	4.7	15.5	86	79
1126	Dhollera.	1930-31	23-7-31	..	..	..	..	110	179	8850	6.10	17.98	19.5	65.0	1072	19.9	102.8	2046	4	5.2	17.1	88	81
1126	Dhollera.	1930-31	24-7-31	..	..	..	..	70	187	10750	6.25	20.23	19.9	62.1	1236	19.8	110.2	2182	4	4.7	19.4	87	84
1368	Dhollera.	1931-32	21-6-32	13.6	8.1	0.6	22.3	7	196	7750	5.00	14.98	13.6	95.0	1292	14.0	170.0	2380	3	0.8	14.4	89	70
1368	Dhollera.	1931-32	21-6-32	..	..	..	..	30	190	8300	5.69	15.97	16.0	73.3	1173	16.3	127.4	2077	3	0.5	15.3	90	74
1368	Dhollera.	1931-32	21-6-32	..	..	..	..	52	174	8700	5.71	17.98	19.4	58.4	1183	19.2	106.6	2047	4	0.8	17.2	90	76
1886	Dhollera.	1932-33	22-8-33	12.2	11.0	0.4	23.6	51	198	8250	5.21	14.98	14.0	84.4	1182	19.8	189.0	2908	3	0.5	14.6	88	69
1886	Dhollera.	1932-33	23-8-33	..	..	..	..	55	184	8200	5.60	15.97	15.8	72.6	1147	15.7	161.4	2534	4	1.0	15.4	88	71
2357	Dhollera.	1933-34	20-6-34	18.6	11.3	0.3	29.9	30	192	8250	5.11	15.97	16.1	79.4	1270	15.0	153.4	2519	3	1.5	15.5	86	80
2357	Dhollera.	1933-34	28-6-34	..	..	..	..	42	175	8550	5.88	17.98	19.9	60.2	1198	20.1	114.8	2397	4	1.8	17.3	86	83
2357	Dhollera.	1933-34	28-6-34	..	..	..	..	52	188	9800	5.80	19.26	20.0	62.3	1252	20.5	110.4	2283	4	2.0	18.5	85	80
2830	Dhollera.	1934-35	28-8-35	13.8	13.3	0.6	27.7	7	198	7850	5.25	13.92	12.3	100.6	1237	12.2	212.4	2591	3	1.0	13.3	87	82
2830	Dhollera.	1934-35	27-8-35	..	..	..	..	67	198	8650	5.23	15.97	15.1	76.6	1167	15.3	168.8	2480	3	0.8	15.1	87	84
2830	Dhollera.	1934-35	27-8-35	..	..	..	..	64	180	9350	5.71	19.26	20.2	51.7	1044	20.1	105.4	2119	4	1.0	18.5	87	72
3231	Dhollera.	1935-36	16-6-36	8.9	8.2	0.2	16.5	7	194	7350	5.21	13.92	12.7	97.4	1237	12.3	207.2	2549	3	0.8	13.5	88	74
3231	Dhollera.	1935-36	16-6-36	..	..	..	..	24	192	8550	5.38	15.97	15.7	75.1	1179	16.0	162.0	2592	4	1.0	15.4	89	76

* Diameter of ring frame front roller— $\frac{1}{8}$ ". Diameter of ring— $\frac{1}{16}$ ".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

13.—KALAGIN COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
757	Kalagin	Manavadar	1929-30
1155	"	"	1930-31
1431	"	Porbunder	1931-32
1888	"	"	1932-33
2358	"	"	1933-34
2771	"	"	1934-35
3327	"	Manavadar	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 :—Porcupine Crighton (twice), Hopper, Scutcher (3 times). 1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KALAGIN.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	Dull creamy-white; fairly bright.	Creamy white.	White to creamy-white	Creamy white; brightish.	Creamy white; fairly bright.	Creamy white.	White to creamy-white; brightish.
Cleanliness ..	Very leafy indeed.	Very leafy	Very leafy	Very leafy	Very leafy; noticeably stained.	Very leafy	Leafy.
Feel ..	..	Good-bodied.	..	Good ..	Good soft ..	Good ..	Good smooth.
Ginning & Neppiness ..	Fairly well-ginned.	A trifle knotted.	A trifle knotted and nepped.	..	Well-ginned.	Fairly well-ginned.	Well-ginned.
Seeds ..	2.5% unginned.	3.5% ginned and unginned	Too many cut seeds besides 3.75% mainly unginned.	2.1% partly ginned and unginned.	2.35% clean and unginned	Contains a good amount of partly ginned and full clean seeds.	..
Card Sliver ..	A little leafy	A trifle leafy	Leafy	Leafy	Leafy	Leafy	Leafy.
Card Web ..	..	Even and nepp-free.	Fairly good	Good	Full	Full	Good.
Weight of 10 flat strips.	16.9 grams	20.5 grams	23.8 grams	22.4 grams	32.0 grams	36.0 grams	18.7 grams.
Remarks ..	Licker-in No. 1 all trash; a fair amount of leaf shed over beam and ring rails.	Fully pressed.	..	..	..	..	..

(b) Yarn :—

	KALAGIN.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Fairly leafy	A little leafy	A little leafy	Leafy	Very leafy	Leafy	Leafy.
Evenness ..	Fairly even	Fairly even	Even	Fairly even	Somewhat uneven.	Even	Fairly even.
Neppiness ..	Free of nep	Fairly free of nep.	Almost free of nep.	Free of nep	Slightly neppy.	..	A trifle neppy.
Slubbiness ..	..	..	..	..	..	A little slubby.	..

3. *Spinning Test Details and Results*.—See Table 13 on page 39.

II.—REPORT OF THE STANDARDS COMMITTEE FOR KALAGIN COTTON.

KALAGIN.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	F. G. M. G. Broach.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, July/Aug. 1933 delivery.	F. G. M. G. Broach H. C. No. 2, July/Aug. 1934.	F. G. M. G. Broach H. C. No. 2, July/Aug. 1935 delivery.	F. G. M. G. Broach Hedge Con- tract No. 2 July/Aug. 1936 delivery.
Class	Fine.	Fine.	Fully good.	Fully good.	Fully good.	Fine.	Superfine.
Colour	Very slight blue.	Greyish white.	Bluish white.	Greyish white.	Grey.	Dullish white.	White.
Staple Length	$\frac{7}{8}$ inch.	$\frac{7}{8}$ inch.	$\frac{3}{4}$ inch.	Full $\frac{3}{4}$ inch.	$\frac{7}{8}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.
Staple Strength	Good.	Weak.	Fair.	Good.	Good.	Weak.	Weak.
Regularity	Regular.	Irregular.	Regular.	Regular.	Slightly irregular.	Irregular.	Fairly regular.
Value above or below contract rate	Rs. 10 on.	Rs. 5 on.	Rs. 3 off.	Rs. 9 off.	Rs. 1 off.	Rs. 8 on.	Rs. 5 on.
Basis	Rs. 242.	Rs. 162.	Rs. 219.	F. G. M. G. Broach No. 2, July/ Aug. 1933 delivery, Rs. 207.	F. G. M. G. Broach H. C. No. 2, July/Aug. 1934 delivery, Rs. 208.	F. G. M. G. Broach H. Contract No. 2, July/Aug. 1935 delivery, Rs. 229.	F. G. M. G. Broach Hedge Con- tract No. 2 July/ Aug. 1936 delivery, Rs. 238.
Date of valuation	8-8-30.	10-8-31.	17-8-32.	26-7-33.	10-6-34.	2-7-35.	9-8-36.
Remarks .. .. .	..	..	..	..	..	..	..

Table 13.—SPINNING TEST RESULTS FOR KALAGIN COTTON.

63

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE.		RELATIVE HUMIDITY (%).
				Flow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inches).	Count-Work Product.	Evenness Class.	Neeps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.	Testing Room.
727	Kalagin	1929-30	14-0-30	18.3	10.5	0.6	27.3	10	106	..	4.00	17.98	19.7	73.8	1464	20.2	112.8	2270	3	1.5	17.2	90	08	70
727	Kalagin	1929-30	14-0-30	..	..	..	..	40	170	..	5.05	19.73	23.8	55.5	1321	24.4	80.2	1067	5	2.0	10.0	90	08	09
1155	Kalagin	1930-31	14-8-31	16.3	12.5	0.6	29.4	74	164	8100	5.83	17.98	20.3	51.9	1054	20.4	104.4	2180	4	1.7	17.2	85	78	80
1155	Kalagin	1930-31	14-8-31	..	..	..	..	129	190	10850	5.05	20.23	19.8	87.1	1329	19.7	114.0	2246	4	2.0	10.4	87	74	81
1431	Kalagin	1931-32	23-8-32	22.0	16.2	0.8	36.2	143	106	8300	5.43	17.98	20.2	53.7	1086	20.3	102.0	2063	3	1.2	17.2	90	70	71
1431	Kalagin	1931-32	23-8-32	..	..	..	..	211	100	10600	5.43	20.23	20.0	83.7	1274	19.7	100.0	2147	3	1.0	19.3	91	08	71
1849	Kalagin	1932-33	23-8-33	18.3	14.7	0.3	30.5	24	122	8160	5.43	15.97	16.1	70.8	1236	16.4	138.0	2273	4	1.0	15.2	88	70	70
1849	Kalagin	1932-33	23-8-33	..	..	..	..	88	168	8350	5.43	17.98	19.7	61.7	1215	19.3	109.8	2186	5	1.2	16.9	87	73	08
2359	Kalagin	1933-34	30-6-34	18.8	19.8	0.6	35.2	169	180	7700	5.11	14.98	14.0	78.2	1095	13.7	170.2	2332	4	1.8	14.4	86	79	80
2359	Kalagin	1933-34	30-6-34	..	..	..	..	139	180	7800	5.88	15.97	16.1	53.0	943	16.3	121.0	1082	5	1.8	15.1	86	80	82
2359	Kalagin	1933-34	30-6-34	..	..	..	..	145	180	8350	5.80	19.20	20.3	47.3	980	20.4	98.8	2010	5	2.0	18.1	85	80	80
2771	Kalagin	1934-35	19-7-35	16.0	10.8	0.2	25.5	22	210	8900	5.11	15.98	13.8	105.1	1460	13.7	201.2	2750	3	2.2	14.4	84	76	77
2771	Kalagin	1934-35	20-7-35	..	..	..	..	12	108	8850	5.95	15.97	16.3	81.9	1385	16.0	102.2	2595	3	2.5	15.6	83	77	73
2771	Kalagin	1934-35	19-7-35	..	..	..	..	21	182	9000	6.10	19.20	20.5	61.5	1291	20.5	114.8	2353	1	2.5	18.5	85	75	78
3257	Kalagin	1935-36	22-8-36	10.0	12.8	0.2	22.3	0	202	8350	5.31	14.98	14.3	102.7	1469	14.1	212.8	3000	4	1.5	14.5	85	77	69
3257	Kalagin	1935-36	22-8-36	..	..	..	..	6	184	8450	6.02	15.97	16.0	87.7	1403	16.0	174.6	2794	4	1.8	15.3	85	75	69
3257	Kalagin	1935-36	21-8-36	..	..	..	..	21	184	10100	6.07	19.20	20.0	72.8	1456	19.9	122.2	2432	4	2.0	18.4	86	73	70

* Diameter of ring frames front roller— $\frac{1}{2}$ ". Diameter of rings— $\frac{1}{16}$ ".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

14.—KADI-VIRAMGAM COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
727	Kadi-Viramgam	Kadi ..	1929-30.
1161	"	" ..	1930-31.
1430	"	Jotana ..	1931-32.
1887	"	Kadi ..	1932-33.
2459	"	Viramgam.	1933-34.
3326	"	"	1935-36.

I. SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room*.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
1935-36—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KADI-VIRAMGAM.					
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Colour	Creamy to creamy-white.	White to creamy-white.	White to creamy-white.	Creamy-white; brightish.	White to creamy-white.	White to creamy-white; brightish.
Cleanliness	Leafy	Leafy; slightly stained.	Leafy	Very leafy ..	Slightly stained; leafy.	A little stained; leafy.
Feel .. ..	.. ..	Moderately good.	Good	Good	Good	Good.
Ginning and neppiness.	.. ..	Well-ginned ..	.. ..	Well-ginned ..	Well-ginned ..	A trifle knotted.
Seeds	Far too much cut seed.	1.25% seeds ..	Considerable number of cut besides 1.1% ginned and unginned.	1.2% unginned.	1.72% seeds ..	.. ..
Card sliver	Clean	Fairly clean ..	Clean	Almost clean ..	A little leafy ..	A little leafy.
Card web	Clear	Even and nep-free.	Fairly good ..	Good	Good	Fairly good.
Weight of 10 flat strips.	16.2 grams ..	17.8 grams ..	17.8 grams ..	22.6 grams ..	26.7 grams ..	17.7 grams.
Remarks	Fairly well-watered at the time of pressing.	Fully-pressed.	.. ..	Well-watered.	.. ..	.. ..

(b) Yarn :—

	KADI-VIRAMGAM.					
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Cleanliness	Clean	Fairly clean ..	Clean	A trifle leafy ..	Clean	Almost clean.
Evenness	Even	Fairly even ..	Fairly even ..	Fairly even ..	Fairly even ..	Fairly even.
Neppiness	A little neppy.	Somewhat neppy.	Fairly nep-free.	Free of nep. ..	Fairly neppy ..	Fairly free of nep.
Slubbiness	Slubby .. ..	.. ..	.. ..	Occasional slub.	.. ..	.. ..

3. Spinning Test Details and Results :—See Table 14 on page 42.

IL--REPORT OF THE STANDARDS COMMITTEE ON KADI-VIRAMGAM.

KADI-VIRAMGAM.									
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1935-36.		
Contract valued under	..	F. G. M. G. Branch	F. G. M. G. Branch No. 2.	F. G. M. G. Branch No. 2.	F. G. M. G. Branch No. 2.	F. G. M. G. Branch No. 2.	F. G. M. G. Branch No. 2.	F. G. M. G. Branch	Hedge Contract No. 2.
Class	..	Superfine	Strict fine	Fine	Fine to superfine	Fully good to fine	Fine to superfine.	July/August 1936	delivery.
Colour	..	Silvery	Creamy-white	White	Creamy-white	Dull-white	White.	July/August 1936	delivery.
Staple Length	..	7/8 inch	Barely 7/8 inch	Full 3/4 inch	5/8 inch	Full 3/4 inch	3/4 inch.	July/August 1936	delivery.
Staple Strength	..	Fair	Fair	Fair	Fair	Fair	Moderate.	July/August 1936	delivery.
Regularity	..	Fair	Irregular	Irregular	Irregular	Fair	Fairly regular.	July/August 1936	delivery.
Value above or below contract rate	..	Ra. 7 on	Ra. 8 on	Ra. 4 on	Ra. 3 off	Ra. 3 on	Ra. 2 on.	July/August 1936	delivery.
Basis	..	Ra. 255	Ra. 143	Ra. 219	Ra. 207.	Ra. 220.	Ra. 228.	July/August 1936	delivery.
Date of Valuation	..	29-4-30	25-3-31	17-8-32	20-7-33	13-8-34	8-8-36.	July/August 1936	delivery.
Remarks	..	This year poor character.	..	..	..	..	..	July/August 1936	delivery.

Table 14—SPINNING TEST RESULTS FOR KADL-VIRAMGAM COTTON.

42

1	2	3	4	5	6	7	8	9	10	11	RING FRAME PARTICULARS.*				WASTE PERCENTAGES.				Weight of Samples (lbs.).	Counts Nominal.	Date of Spinning.	Cotton.	Season.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
											Yarn Breakages per 100 spindles per hour.	Front Roller Speed H.P.M.	Spindle Speed H.P.M.	Draft.	Turns per Inch.	Blow Room Loss.	Card Room Loss.	Spinning Loss.						Total Loss.†																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Sample No.																									TEMPERATURES (°F.).	Spiraling Room.	Spiraling Room.	RELATIVE HUMIDITY (%).																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

* The ring frame front-roller used in the spinning of these yarns has a diameter of $\frac{3}{4}$ inch. The diameter of rings—14".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

15.—WESTERNS JAVARIA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
795	Westerns Javaria	Bellary	1929-30.
1127	Westerns "	Adoni.	1930-31.
1370	Westerns "	Adoni.	1931-32.
1889	Westerns "	Raichur.	1932-33.
2356	Westerns "	Adoni.	1933-34.
2838	Westerns "	Raichur.	1934-35.
3398	Westerns "	Adoni.	1935-36.

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. I.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. I possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	WESTERNS.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy; fairly bright.	Creamy-white.	Creamy-white.	Creamy-white.	Creamy-white.	Dull creamy.	Creamy-white; dullish.
Cleanliness	Very leafy.	Leafy; rather badly stained.	Leafy; slightly stained.	Much stained; leafy.	Very leafy.	Badly stained; leafy.	Leafy; slightly stained.
Feel	Good.	Fairly good but softish.	Softish.	Poorish.	Good.	Good.	Good.
Ginning and neppiness .. ..	..	Fairly well-ginned.	Well-ginned.	S o m e w h a t knotted.	Well-ginned.	S o m e w h a t knotted.	A trifle knotted.
Seeds	1.72% full clean.	..	0.7% ginned and unginned.	..	1% full clean.	..	..
Card Sliver .. ..	..	A trifle leafy.	A little leafy.	Almost clean.	Fairly leafy.	Fairly clean.	Almost clean.
Card Web .. .. .	..	Very slightly neppy.	Good.	Good.	Good even.	A little neppy.	Even; nepp-free.
Weight of 10 flat strips. .	21.2 grams.	17.6 grams.	14.3 grams.	18.4 grams.	23.7 grams.	22.5 grams.	14.7 grams.
Remarks	Locker-in fly No. 1 all trash	..	..	..	..	..	..

(b) Yarn :—

	WESTERNS.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean.	Fairly clean.	Fairly clean.	Clean.	A little leafy.	Almost clean.	Almost clean.
Evenness	Fairly uneven.	Fairly even.	Even.	Fairly even.	Fairly even.	Even.	Fairly even.
Neppiness	Very neppy.	Neppy.	A little neppy.	Fairly free of nep.	S o m e w h a t neppy.	Fairly free of nep.	S o m e w h a t neppy.
Slubbiness .. .. .	..	..	..	..	Slubby.	Slightly slubby.	..

3. Spinning Test Details and Results :—See Table 15 on page 45.

II.—REPORT OF THE STANDARDS COMMITTEE FOR WESTERNS.

WESTERNS.									
		1920-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	F.G.M.G. Branch No. 2	F.G.M.G. Branch No. 2	F.G.M.G. Branch No. 2, July/August 1933 delivery.	F.G.M.G. Branch H. C. No. 2, July/August 1934.	F.G.M.G. Branch H. C. No. 2, July/August 1935 delivery.	F.G.M.G. Branch H. C. No. 2, April/May 1937 delivery.	
Class	Superfine.	Superfine.	Good to Fully good.	Fully good.	Fine.	Fine.	
Colour	Yellowish.	Brownish-dull white.	Brownish.	Brownish white.	Brownish.	Creamy brown.	
Staple Length	Full 3/4 inch.	3/4 inch.	5/8 inch.	3/4 inch.	13/16 inch.	11/16 inch.	
Staple Strength	Fairly good.	Weak.	Fair.	Fair.	Moderate.	Poor.	
Regularity	Irregular.	Irregular.	Irregular.	Irregular.	Fair.	Irregular.	
Valued above or below Contract rate	Rs. 10 on.	Rs. 8 on.	Rs. 5 off.	Par.	Rs. 30 on.	Rs. 10 off.	
Basis	Rs. 177.	Rs. 152.	F.G.M.G. Branch No. 2, July/August 1933 delivery, Rs. 207.	F.G.M.G. Branch H. C. No. 2, July/August 1934 delivery, Rs. 208.	F.G.M.G. Branch H. C. No. 2, July/August 1935 delivery, Rs. 224.	F.G.M.G. Branch H. C. No. 2, April/May 1937 delivery, Rs. 219.	
Date of Valuation	11-7-31.	13-6-32.	26-7-33.	19-6-34.	20-8-35.	5-10-36.	
Remarks	Probably mixed with Mangrai.	..	..	..	..	..

Table 15.—SPINNING TEST RESULTS FOR WESTERNS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE. (°F.)	RELATIVE HUMIDITY. (%)		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller speed R.P.M.	Spindle speed R.P.M.	Draft.	Turns per inch.	L.S.A.			BALISTIC.			Reveress Class.	Knots per yard.	Turns per inch Actual.				
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count-Work Product.							
705	Westerns	1929-30	24-7-30	20A	10	13.0	11.0	0.7	24.7	63	176	..	5.32	17.98	19.6	40.4	963	20.0	91.2	1894	4	10.7	17.0	86	78	72	
706	Westerns	1929-30	24-7-30	20B	..	..	..	..	..	50	192	..	5.32	20.23	19.3	66.7	1237	19.3	107.3	2031	4	11.5	19.3	87	71	76
1127	Westerns	1930-31	24-7-31	20A	10	10.8	10.8	0.4	20.7	30	100	9450	5.42	17.98	20.1	66.6	1339	20.0	115.0	2312	4	8.0	16.9	88	75	92	
1127	Westerns	1930-31	25-7-31	24	40	150	8290	6.45	19.73	23.7	52.0	1212	24.3	92.0	2226	5	8.5	18.7	87	76	80
1370	Westerns	1931-32	23-6-32	20A	10	11.2	9.0	0.5	19.7	36	104	9590	5.67	17.99	19.4	77.7	1507	19.7	126.4	2190	3	2.5	17.3	86	69	78	
1370	Westerns	1931-32	23-6-32	24	..	..	..	..	..	3	175	9590	6.68	19.73	23.1	59.6	1194	23.2	101.2	2348	4	3.0	19.3	86	72	78
1889	Westerns	1932-33	1-8-33	16	10	15.0	10.8	0.4	24.5	73	181	8000	5.33	15.97	15.9	74.4	1183	16.1	132.0	2123	4	2.0	15.2	86	68	67	
1889	Westerns	1932-33	31-8-33	20A	..	..	..	..	..	151	178	8800	5.55	17.98	19.9	55.4	1102	20.3	103.0	2091	5	2.0	17.2	87	60	67
2356	Westerns	1933-34	29-6-34	16	10	14.1	13.0	0.5	25.0	12	162	8250	5.63	15.97	16.0	71.3	1141	15.8	133.6	2111	4	2.5	15.4	86	78	81	
2356	Westerns	1933-34	29-6-34	20A	..	..	..	..	..	109	175	8250	5.98	17.98	19.8	55.3	1093	19.9	102.6	2012	5	2.0	17.3	86	80	85
2359	Westerns	1933-34	28-6-34	20B	..	..	..	..	..	114	188	9800	5.95	19.26	20.0	60.2	1204	19.7	107.0	2103	4	2.5	18.4	85	80	80
2838	Westerns	1934-35	31-8-35	16	10	10.8	12.7	0.2	22.3	18	108	8800	5.80	15.97	15.9	107.2	1704	16.0	183.0	2938	3	1.8	15.4	85	75	74	
2838	Westerns	1934-35	30-8-35	20A	..	..	..	..	..	20	170	8650	5.93	17.93	20.1	73.2	1312	20.1	129.2	2397	3	2.0	17.0	86	75	74
2838	Westerns	1934-35	31-8-35	20B	..	..	..	..	..	10	185	9000	6.07	19.26	20.5	79.2	1024	20.6	127.6	2629	3	2.0	18.3	85	76	72
3398	Westerns	1935-36	14-10-36	16	10	12.5	10.5	0.2	21.8	0	104	8200	5.71	15.97	16.5	80.0	1330	16.3	136.2	2247	3	3.5	15.4	80	66	61	
3398	Westerns	1935-36	14-10-36	20A	..	..	..	..	..	5	161	9000	5.83	17.98	19.7	66.0	1300	19.9	111.4	2306	4	2.5	17.1	83	70	64
3398	Westerns	1935-36	14-10-36	20B	..	..	..	..	..	6	197	10360	5.95	19.26	20.3	72.2	1166	20.6	109.2	2250	4	2.5	18.7	87	69	63

* Diameter of ring frame front roller—7/8". Diameter of rings—1-5/8".

† It is to be noted that the total loss is for a small sample spun under mill conditions; it would be less than shown here.

16.—FARM WESTERNS COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
758	Farm Westerns ..	.. Guntakal ..	1929-30
1128	" ..	.. Adoni ..	1930-31
1371	" ..	.. Bellary ..	1931-32
1890	" ..	.. Adoni ..	1932-33
2297	" ..	.. Bellary ..	1933-34
2772	" ..	.. Adoni ..	1934-35
3323	" ..	.. Raichur ..	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

	FARM WESTERNS.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	Creamy ..	C r e a m y white.	Creamy-white ..	Creamy-white ..	W h i t e t o creamy-white; fairly bright.	Creamy-white ; fairly bright.	Creamy-white.
Cleanliness ..	Very leafy ..	Leafy ..	Leafy; a good deal stained.	Stained; leafy..	Leafy ..	Leafy ..	Leafy (fine leaf); stained.
Feel ..	..	Good ..	Good softish ..	Good ..	Good ..	Good ..	Good.
Ginning and neppiness.	Fairly well-ginned.	Well-ginned ..	Well-ginned ..	S o m e w h a t knotted.	Well-ginned ..	Well-ginned ..	A little knotted.
Seeds ..	1.56% ginned and unginned.	..	1.4% ginned and unginned.	..	2.2% unginned and full clean.	Contains too many full clean.	Few.
Card sliver ..	Fairly clean ..	Slightly leafy.	A little leafy ..	Clean ..	Fairly clean ..	Leafy ..	Almost clean.
Card web ..	..	Even and almost nep-free.	Good ..	Good ..	Good even ..	Full ..	Good.
Weight of 10 flat strips.	16.4 grams ..	18.7 grams ..	16.0 grams ..	18.5 grams ..	16.3 grams ..	25.1 grams ..	15.1 grams.
Remarks ..	Much leaf shed over beam and ring rails.	Fully pressed ..	..	..	..	..	..

(b) *Yarn* :—

	FARM WESTERNS.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Fairly leafy ..	A little leafy ..	Fairly clean ..	Clean ..	Almost clean ..	S o m e w h a t leafy.	Almost clean.
Evenness ..	Even ..	Fairly uneven.	Even ..	Fairly even ..	Even ..	Fairly even ..	Even.
Neppiness ..	A little neppy.	Neppy ..	A little neppy.	Almost free of nep.	Practically free of nep.	S o m e w h a t neppy.	Slightly neppy.
Slubbiness ..	..	..	..	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 16 on page 48.

II. REPORT OF THE STANDARDS COMMITTEE FOR FARM WESTERNS COTTON.

FARM WESTERNS.									
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	.. ..	F. G. M. G. Broach ..	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, July/Aug. 1933 delivery.	F. G. M. G. Broach No. 2, April/May 1934 delivery.	F. G. M. G. Broach H. C. No. 2, July/Aug. 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1936 delivery.	
Class	.. ..	Extra superfine	Extra superfine	Superfine	Fully good to fine	Superfine	Superfine	Fully good to fine.	
Colour	.. ..	White	Creamy-white	Brownish-white	Brownish	Whitish	Creamy-white	Dull white.	
Staple Length	.. ..	$\frac{3}{4}$ inch	Full $\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	
Staple Strength	.. ..	Good	Strong	Good	Good	Good	Fairly good	Moderate.	
Regularity	.. ..	Regular	Regular	Regular	Regular	Regular	Regular	Slightly irregular.	
Value above or below contract rate..	.. ..	Rs. 45 on	Rs. 50 on	Rs. 30 on	Rs. 25 on	Rs. 40 on	Rs. 65 on	Rs. 15 off.	
Basis	.. ..	Rs. 242	Rs. 177	Rs. 162	F. G. M. G. Broach No. 2, July/Aug. 1933 delivery Rs. 207.	F. G. M. G. Broach No. 2, April/May 1934 delivery Rs. 187.	F. G. M. G. Broach H. C. No. 2, July/Aug. 1935 delivery Rs. 229.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1936 delivery Rs. 228.	
Date of valuation	6-8-30	14-7-31	13-6-32	20-7-33	3-5-34	2-7-35	8-8-36.	
Remarks	

Table 16.—SPINNING TEST RESULTS FOR FARM WESTERNS COTTON.

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	LEA.			BALISTIC.			Reps per yard.	Turns per inch Actual.	Spinning Room.			Spinning Room.	Testing Room.
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of (inch-lbs.)	Count-Work Product.							
758	Farm Westerns.	1929-30	14-6-30	20	10	13.0	11.1	0.6	23.1	5	190	..	4.90	17.08	19.6	83.8	1642	10.7	121.8	2309	3	2.5	17.1	90	68	70	
758	Farm Westerns.	1929-30	14-6-30	24	..	..	..	..	..	44	176	..	5.95	19.73	23.5	61.8	1452	23.6	87.6	2067	4	3.0	19.0	90	68	64
1128	Farm Westerns.	1930-31	24-7-31	20	10	10.3	11.1	0.3	20.5	20	190	9450	5.26	17.98	20.6	84.0	1318	20.9	108.2	2261	4	5.5	17.3	88	75	80	
1128	Farm Westerns.	1930-31	25-7-31	24	..	..	..	..	..	27	150	8200	6.10	19.73	23.6	56.5	1393	23.9	98.4	2352	6	6.5	18.8	86	76	85
1371	Farm Westerns.	1931-32	23-6-32	20	10	12.3	8.7	0.5	20.4	16	194	9500	5.44	17.98	19.6	60.9	1703	20.0	139.2	2784	3	3.0	17.4	80	69	77	
1371	Farm Westerns.	1931-32	23-6-32	24	..	..	..	..	..	24	175	9500	6.41	19.73	23.0	70.7	1690	23.4	114.6	2682	4	3.0	19.3	86	72	81
1890	Farm Westerns.	1932-33	31-8-33	20	10	13.8	10.5	0.5	23.2	145	178	8300	5.68	17.08	19.8	69.0	1200	20.0	111.2	2224	4	1.5	17.2	87	69	70	
1890	Farm Westerns.	1932-33	31-8-33	24	..	..	..	..	..	186	162	8000	5.95	19.73	23.8	45.3	1078	24.0	92.0	2268	4	1.8	19.0	88	70	68
2297	Farm Westerns.	1933-34	22-5-34	20	10	12.2	9.3	0.3	20.6	10	198	9750	5.98	17.08	20.2	88.2	1600	20.1	131.2	2637	3	1.2	17.3	90	68	68	
2297	Farm Westerns.	1933-34	22-5-34	24	..	..	..	..	..	9	180	9300	5.33	19.73	23.5	68.8	1617	24.2	106.2	2570	4	1.5	19.1	90	68	70
2297	Farm Westerns.	1933-34	23-5-34	30	..	..	..	..	..	30	159	9500	6.02	21.86	20.1	49.3	1463	30.3	84.8	2569	5	1.5	21.1	88	68	70
2772	Farm Westerns.	1934-35	18-7-35	20	10	9.4	13.1	0.4	21.6	16	198	9750	6.10	17.08	19.9	86.0	1711	20.0	135.0	2700	3	2.2	17.0	86	72	78	
2772	Farm Westerns.	1934-35	19-7-35	24	..	..	..	..	..	27	180	9800	5.44	19.73	23.8	69.9	1604	23.4	113.0	2658	4	2.5	18.8	85	78	80
2772	Farm Westerns.	1934-35	19-7-35	30	..	..	..	..	..	53	159	9700	6.86	21.86	28.7	52.2	1498	28.5	89.0	2654	5	1.8	21.0	83	77	81
3323	Farm Westerns.	1935-36	20-8-36	16	10	11.6	9.7	0.3	20.4	18	192	8500	5.65	15.97	15.6	93.8	1493	16.1	155.2	2499	3	2.0	15.2	83	74	75	
3323	Farm Westerns.	1935-36	19-8-36	20A	..	..	..	..	..	21	186	9250	6.07	17.98	19.9	66.2	1317	20.4	112.0	2285	4	2.2	17.3	86	72	74
3323	Farm Westerns.	1935-36	19-8-36	20B	..	..	..	..	..	5	190	10000	6.10	19.20	20.0	73.9	1478	20.2	113.6	2205	4	1.2	18.7	86	71	74

* Diameter of ring frame front roller—7/8". Diameter of ring—1/8".
† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

17.—KUMPTA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
759	Kumpta	Hubli.	1929-30.
1129	"	"	1930-31.
1369	"	"	1931-32.
1891	"	"	1932-33.
2298	"	Gadag.	1933-34.
2872	"	"	1934-35.
3399	"	Hubli.	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal Cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper Feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

		KUMPTA.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	.. ..	Creamy.	Dullish creamy.	Dullish creamy-white.	Dullish creamy-white.	Creamy-white.	Creamy-white.	White to creamy white; dullish
Cleanliness	.. ..	Very leafy.	Leafy.	Leafy.	Very leafy; stained.	Leafy.	Very leafy.	Leafy; slightly stained.
Feel	.. .. .	Good.	Moderately good.	..	Good.	Good smooth.	Good.	Good.
Ginning and neppiness		A little nepped and knotted.	..	Well-ginned.	Well-ginned.	A trifle knotted.	Well-ginned.	Well-ginned.
Seeds	.. ..	..	Too much cut and crushed besides 1.1% ginned and unginned.	A few ginned and unginned.	..	1.56% unginned and partly ginned.	..	..
Card Sliver	.. ..	Fairly clean.	Fairly clean.	Clean.	Almost clean.	Fairly leafy.	Clean.	Almost clean.
Card Web	.. ..	..	Even and practically free of nep.	Good.	Even and nep-free.	Good.	Good.	Even; nep-free.
Weight of 10 flat strips		14.7 grams.	16.3 grams.	14.3 grams.	15.2 grams.	16.2 grams.	19.3 grams.	14.3 grams.
Remarks	.. ..	Licker-in fly No. 1 is mainly leaf.	..	..	..	Fairly well watered.	..	..

(b) Yarn :—

		KUMTA.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean.	Fairly clean.	Almost clean.	Clean.	Fairly clean.	Leafy.	Almost clean.	
Evenness	Even.	Fairly even.	Even.	Fairly even.	Fairly even in the two lower counts.	Even.	Even.	
Neppiness	Fairly free of nep.	Slightly neppy.	A trifle neppy.	Free of nep.	A little neppy.	Almost free of nep.	Almost free of nep.	
Slubbiness .. ..	.. ..	.. ..	.. ..	.. ..	A little slubby.	.. ..	.. ..

3. Spinning Test Details and Results :—See Table 17 on page 51.

II. REPORT OF THE STANDARDS COMMITTEE FOR KUMPTA COTTON.

		KUPETA.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	F. G. M. G. Broach:	F. G. M. G. Broach:	F. G. M. G. Broach:	F. G. M. G. Broach:	F. G. M. G. Broach:	F. G. M. G. Broach:	F. G. M. G. Broach:
		No. 2.	No. 2.	No. 2.	No. 2.	No. 2.	No. 2.	No. 2.
Class	.. ..	Fine.	Fine.	Fine.	Fully good.	Fully good to fine.	Fine.	Fine.
Colour	.. ..	Very slight red.	Brown yellow.	Brownish white.	Brownish.	Greyish and creamy.	Dull white.	Greyish.
Staple Length	.. ..	7/8 inch.	Full 7/8 inch.	7/8 inch.	3/4 inch.	Full 3/4 inch.	13/16 inch.	7/8 inch.
Staple Strength	.. ..	Fair.	Good.	Fair.	Fair.	Good.	Good.	Good.
Regularity	.. ..	Irregular.	Regular.	Rather irregular	Irregular.	Regular.	Fairly regular.	Irregular.
Value above or below contract rate	.. ..	Rs. 50 on.	Rs. 50 on.	Rs. 25 on.	Rs. 10 on.	Rs. 22 on.	Rs. 50 on.	Rs. 5 on.
Basis	.. ..	Rs. 242.	Rs. 177.	Rs. 162.	F. G. M. G. Broach:	F. G. M. G. Broach:	F. G. M. G. Broach:	F. G. M. G. Broach:
					No. 2.	No. 2.	No. 2.	No. 2.
					1933 delivery,	Hedge Contract No.	Hedge Contract No.	Hedge Contract No.
					Rs. 207.	2, July/Aug.	2, April/May deli-	2, April/May delivery,
						very, Rs. 192.	very, Rs. 197.	May 1937 delivery,
								Rs. 219.
Date of Valuation	.. ..	6-6-30.	14-7-31.	13-6-32.	26-7-33.	11-5-34.	16-9-35.	5-10-36.
Remarks	.. ..	..	..	..	..	..	..	..

Table 17.—SPINNING TEST RESULTS FOR KUMPTIA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning	Counts Normal.	Weight of sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.								TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).	Testing Room.		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.†	Total Loss.	Yarn Breakages per 100 spindles per hour.	Front Roller Speed	Spindle Speed H. P. M.	Draft.	Turns per inch.	LEI.		BALLISTIC.			Twists per yard.	Turns per inch Actual.				Spinning Room.	
															Counts Actual.	Strength (lbs.)	Count-strength Product.	Counts Actual.	Work of rupture (inches-lbs.)							Count-Work Product.
759	Kumtha ..	1929-30	17-6-30	20	10	14.1	10.0	0.6	23.1	10	106	..	4.20	17.08	20.0	80.0	1018	10.8	114.8	2273	3	2.0	17.2	80	63	67
769	Kumtha ..	1929-30	17-6-30	24	..	..	..	..	..	32	176	..	5.81	10.73	23.8	62.6	1190	21.2	95.6	2264	4	2.0	18.9	90	66	67
1129	Kumtha ..	1930-31	27-7-31	24	10	14.4	10.3	0.5	23.5	24	180	0000	5.63	19.73	24.0	65.7	1377	21.7	101.0	2411	4	1.7	18.9	85	80	83
1129	Kumtha ..	1930-31	27-7-31	30B	..	..	..	..	..	42	153	0700	7.06	23.11	29.6	47.7	1412	22.1	82.4	2193	5	3.0	22.2	86	76	85
1369	Kumtha ..	1931-32	30-6-32	24	10	15.0	0.2	0.6	23.2	42	180	0650	5.77	19.73	22.7	67.2	1323	21.4	97.6	2234	3	1.5	19.1	90	69	73
1369	Kumtha ..	1931-32	22-6-32	30B	..	..	..	..	..	23	153	0550	7.11	21.26	29.6	49.3	1150	20.5	81.2	2295	4	2.0	22.6	87	70	77
1891	Kumtha ..	1932-33	30-8-33	24	10	15.6	8.0	0.5	23.5	150	178	0600	5.53	10.73	23.5	59.5	1375	21.1	91.0	2165	4	0.5	18.8	87	70	67
1891	Kumtha ..	1932-33	31-8-33	30A	..	..	..	..	..	109	150	0000	6.91	21.86	24.6	42.3	1210	29.1	76.4	2223	5	1.0	20.9	86	73	66
2298	Kumtha ..	1933-34	24-5-34	20	10	14.7	9.7	0.4	23.4	21	109	0650	5.81	17.03	19.8	77.1	1527	20.4	111.4	2273	4	1.2	17.1	88	68	70
2298	Kumtha ..	1933-34	29-7-34	24	..	..	..	..	..	32	180	0550	5.32	19.73	23.4	63.4	1184	24.1	97.2	2311	5	1.8	19.6	89	66	70
2298	Kumtha ..	1933-34	29-4-34	30A	..	..	..	..	..	73	154	0100	6.62	21.86	29.8	41.2	1223	30.6	77.2	2362	6	1.5	20.9	89	66	70
2872	Kumtha ..	1934-35	25-0-35	20	10	10.6	13.8	0.1	23.2	26	197	0700	5.95	17.08	20.4	80.2	1820	20.2	127.2	2509	3	1.2	17.1	86	68	71
2872	Kumtha ..	1934-35	24-0-35	24	..	..	..	..	..	18	170	0650	5.23	19.73	23.4	74.0	1751	21.3	109.0	2510	3	1.2	19.0	86	66	72
3390	Kumtha ..	1935-36	16-10-36	20	10	0.4	16.7	0.4	19.4	21	194	0700	6.10	17.08	20.4	85.3	1740	20.1	116.0	2352	3	1.2	17.2	89	71	60
3399	Kumtha ..	1935-36	16-10-36	24	..	..	..	..	..	10	178	0700	5.55	19.73	23.4	72.3	1692	23.1	105.2	2150	4	1.5	19.1	87	66	60
3390	Kumtha ..	1935-36	16-10-36	30A	..	..	..	..	..	17	147	0000	6.76	21.86	29.4	62.4	1541	23.7	86.0	2163	4	1.5	21.1	86	61	63

18.—UPLAND COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
796	Upland	Gadag	.. 1929-30	2475	Upland	Gadag	.. 1933-34
1158	"	Hubli	.. 1930-31	2829	"	"	.. 1934-35
1396	"	Gadag	.. 1931-32	3325	"	"	.. 1935-36
1884	"	"	.. 1932-33				

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	UPLAND.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white; bright.	Creamy-white.	Creamy-white.	Creamy-white.	Creamy-white.	White to creamy-white.	White to creamy-white.
Cleanliness ..	Leafy	Leafy; slightly stained.	Somewhat leafy.	Leafy	Very leafy ..	Fairly clean ..	Slightly stained. Fairly leafy.
Feel	Good .. ..	.. ..	Good softish ..	Softish	Good	Soft; poorish.	Good.
Ginning and Neppiness.	A little nepped and knotted.	Well-ginned except for slight knottiness.	Well-ginned ..	Somewhat knotted in ginning.	Fairly well-ginned.	Well-ginned ..	A trifle knotted.
Seeds	A fair amount of undeveloped seed; 0.63% full clean.	0.6% ginned and unginned.	0.5% unginned.	..	..	Some seeds ..	..
Card Sliver ..	.. ..	Almost clean ..	Clean	Clean	Leafy	Clean; soft ..	Clean.
Card Web	A little cloudy and neppy.	Practically free of nep.	Good	Good	Somewhat cloudy.	Slightly neppy.	Good.
Weight of 10 flat strips.	26.8 grams ..	24.2 grams ..	23.7 grams ..	25.7 grams ..	26.4 grams ..	24.1 grams ..	15.8 grams.
Remarks .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

(b) Yarn :—

	UPLAND.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Fairly leafy ..	Almost clean ..	Almost clean ..	Somewhat leafy.	Leafy	Clean	Almost clean.
Evenness	Very neppy ..	Fairly even ..	Fairly even ..	Fairly even ..	Fairly even ..	Fairly even ..	Even.
Neppiness	Fairly even ..	A trifle neppy.	A trifle neppy.	A little neppy.	Somewhat neppy.	A trifle neppy.	Practically free of nep.
Slubbiness .. ..	.. ..	.. ..	.. ..	A trifle slubby.	.. ..	Somewhat slubby.	.. ..

3. *Spinning Test Details and Results* :—See Table 18 on page 54.

II. REPORT OF THE STANDARDS COMMITTEE FOR UPLAND COTTON.

	UPLAND.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	F. G. M. G. Branch No. 2.	F. G. M. G. Branch No. 2.	F. G. M. G. Branch No. 2.	F. G. M. G. Branch No. 2, July-Aug. 1933 delivery.	F. G. M. G. Branch Hedge Contract No. 2, April-May 1935 delivery.	F. G. M. G. Branch Hedge Contract No. 2, July-Aug. 1935 delivery.	E. M. G. Hedge Contract No. 2, July- Aug. 1936 delivery.
Class	Strict fine ..	Fine ..	Fine ..	Fully good to fine ..	Fine ..	Superfine ..	Superfine.
Colour	Bluish white ..	White but slightly creamy.	Bluish white ..	Whitish ..	Whitish ..	Whitish ..	White.
Staple Length	7/8 inch ..	29/32 inch ..	Full 3/4 inch ..	11/16 inch ..	13/16 inch ..	3/4 inch ..	11/16 inch.
Staple Strength	Good ..	Good ..	Fair ..	Fair ..	Good ..	Fair ..	Fair.
Regularity	Regular ..	Regular ..	Regular ..	Irregular ..	Irregular ..	Fair ..	Somewhat irregular.
Value above or below contract rate ..	Rs. 50 on ..	Rs. 35 on ..	Rs. 20 on ..	Rs. 5 on ..	Rs. 5 off ..	Rs. 15 on ..	Rs. 7 off.
Basis	F. G. M. G. Branch ..	Rs. 102 ..	Rs. 160 ..	F. G. M. G. Branch No. 2, July-Aug. 1933 delivery, Rs. 207.	F. G. M. G. Branch H. C. No. 2, April- May 1935 delivery, Rs. 221.	H. C. No. 2, July- Aug. 1935 delivery, Rs. 224.	E. M. G. Branch Hedge contract No. 2, July-Aug. 1936 delivery, Rs. 228.
Date of Valuation	10-7-30 ..	10-8-31 ..	27-0-32 ..	26-7-33 ..	20-8-34 ..	13-8-35 ..	8-8-36.
Remarks .. .. .	..	..	..	..	..	..	..

Table 18.—SPINNING TEST RESULTS FOR UPLAND COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.).	WASTE PERCENTAGES.				RING FRAME PARTICULARS*.						YARN TEST RESULTS.						TEMPERATURE ATOM. HUMIDITY. (°/o).	RELATIVE HUMIDITY. (°/o).				
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	L.E.L.			BALISTIC.			Evenness Class.			Keps per yard.	Turns per inch.	Spiraling Room.	Spiraling Room.
															Counts Actual.	Strength (lbs.).	Count-Product.	Counts Actual.	Work of Rupture (inches).	Count-Work Product.							
706	Upland ..	1929-30	23-7-30	20	10	10.3	13.8	0.5	23.1	50	194	..	5.10	17.98	19.7	80.1	1578	10.0	128.4	2518	3	0.5	17.1	86	73	76	
706	Upland ..	1929-30	24-7-30	24	..	..	..	..	..	24	180	..	6.10	19.73	23.9	58.2	1301	24.0	91.0	2184	4	11.7	18.8	86	76	72
1168	Upland ..	1930-31	17-8-31	20	10	9.2	12.3	0.3	20.9	11	190	9400	5.95	17.98	20.0	74.1	1482	20.1	132.2	2456	4	2.0	17.1	84	79	81	
1168	Upland ..	1930-31	18-8-31	24	..	..	..	..	..	18	160	8900	6.13	19.73	24.1	57.5	1386	24.5	98.4	2411	3	2.7	18.6	85	77	77
1396	Upland ..	1931-32	18-7-32	20	10	10.0	13.5	0.7	22.7	114	184	9200	5.08	17.98	19.7	62.0	1221	19.0	118.2	2317	4	2.0	17.1	86	78	79	
1396	Upland ..	1931-32	18-7-32	24	..	..	..	..	..	162	157	8500	5.08	19.73	24.0	43.6	1040	24.0	91.0	2233	5	2.5	19.0	86	70	70
1884	Upland ..	1932-33	19-8-33	20	10	14.4	13.8	0.6	26.0	192	185	9000	5.08	17.98	19.8	60.0	1206	19.0	100.4	2177	4	3.0	17.5	87	70	68	
1884	Upland ..	1932-33	22-8-33	24	..	..	..	..	..	200	156	8500	6.10	19.73	23.9	45.4	1085	24.5	92.6	2268	5	3.5	19.2	86	69	70
2475	Upland ..	1933-34	5-9-34	20	10	13.1	14.7	0.4	26.2	31	187	9200	6.01	17.98	20.2	72.9	1473	20.4	117.2	2391	4	3.8	17.0	84	77	78	
2475	Upland ..	1933-34	5-9-34	24	..	..	..	..	..	55	172	9250	6.10	19.73	24.3	64.2	1317	24.3	97.0	2357	5	4.0	19.0	83	80	72
2829	Upland ..	1934-35	27-8-35	20	10	13.1	12.9	0.6	24.8	57	176	8800	5.98	17.98	20.2	64.2	1267	20.5	129.2	2610	4	1.8	17.3	86	71	73	
2829	Upland ..	1934-35	26-8-35	24	..	..	..	..	..	68	164	8350	6.28	19.73	23.8	54.3	1292	23.6	111.8	2627	5	2.0	18.7	85	70	78
3325	Upland ..	1935-36	20-8-36	20	10	8.8	10.4	0.3	18.4	21	180	9200	5.95	17.98	19.6	80.1	1576	20.0	137.8	2756	4	1.2	17.3	86	71	78	
3325	Upland ..	1935-36	21-8-36	24	..	..	..	..	..	23	172	9350	6.10	19.73	23.1	62.8	1451	23.1	114.0	2633	4	1.0	19.0	85	73	79

* Diameter of ring frame front roller—7/8". Diameter of rings—1 5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

19.—BIJAPUR COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
750	Bijapur	Bijapur	1929-30
1156	"	"	1930-31
1397	"	"	1931-32
1892	"	"	1932-33
2474	"	"	1933-34
2842	"	"	1934-35
3324	"	"	1935-36

I. SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room*.—Upto 1933-34.—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Röver and spun from single hank roving on Ring Frame No. 1.
1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	BIJAPUR.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy ..	Creamy-white ..	Dull creamy ..	Dullish creamy-white.	Creamy-white.	Creamy-white.	Creamy.
Cleanliness ..	Very leafy ..	Very leafy ..	Leafy ; some-what stained.	..	Very leafy ..	Very leafy ..	Leafy.
Feel	Good ..	Full-bodied ..	Poorish soft ..	Good ..	Good ..	Poorish ..	Fairly good.
Ginning and neppiness.	Fairly well-ginned.	..	A good deal knotted.	S o m e w h a t knotted.	Well-ginned.	Well-ginned ..	A little knotted.
Seeds	1.17% full clean and out.	2% ginned and unginned.	0.75% ginned and unginned.	0.6% ginned and unginned.	..	..	Some seeds.
Card Silver ..	..	Fairly clean ..	A little leafy ..	Clean ..	Fairly leafy ..	Little leafy ..	Almost clean.
Card Web ..	..	Even and free of nep.	Fairly good ..	Even and nep-free.	Good ..	Good ..	Good.
Weight of 10 flat strips	14.2 grams ..	19.5 grams ..	22.1 grams ..	15.0 grams ..	21.0 grams ..	22.3 grams ..	15.4 grams.
Remarks .. ..	..	Fully pressed ..	..	..	..	..	..

(b) Yarn :—

	BIJAPUR.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Fairly clean ..	Clean ..	S o m e w h a t leafy.	Clean ..	A little leafy ..	Fairly clean ..	Almost clean.
Evenness ..	Even ..	S o m e w h a t uneven.	Even in lower counts only.	Fairly even ..	Fairly even ..	Even ..	Very even.
Neppiness ..	Free of nep ..	Fairly free of nep.	Fairly free of nep.	Free of nep ..	Fairly free of nep.	Free of nep ..	Practically free of nep.
Slubbiness ..	..	..	..	..	..	..	..

3. Spinning Test Details and Results :—See Table 19 on page 57.

II.—REPORT OF THE STANDARDS COMMITTEE FOR BIJAPUR COTTON.

		BIJAPUR.						
		1929-30. ..	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under .. ..	.. ..	F. G. M. G. Broach ..	F. G. M. G. Broach .. No. 2.	F. G. M. G. Broach .. No. 2.	F. G. M. G. Broach .. No. 2, July/Aug. 1933 delivery.	F. G. M. G. Broach .. Hedge Contract No. 2, April/May 1935 delivery.	F. G. M. G. Broach .. Hedge Contract No. 2, July/Aug. 1935 delivery.	F. G. M. G. Broach .. Hedge Contract No. 2, July/Aug. 1936 delivery.
Class .. ..	.. ..	Barely fine ..	Fine ..	Fully good to fine ..	Good ..	Strict fine ..	Fine ..	Fully Good to Fine.
Colour .. ..	.. ..	Reddish ..	Creamy ..	Brownish ..	Reddish brown ..	Brownish ..	Brownish white ..	Brownish.
Staple Length .. ..	.. ..	3/4 inch ..	13/16 inch ..	3/4 inch ..	5/8 inch ..	3/4 inch ..	11/16 inch ..	3/4 inch.
Staple Strength .. ..	.. ..	Fair ..	Fair ..	Fair ..	Fair ..	Fair ..	Poor ..	Moderate.
Regularity .. ..	.. ..	Fair ..	Irregular ..	Regular ..	Irregular ..	Fair ..	Irregular ..	Fairly regular.
Value above or below contract rate ..	.. ..	Rs. 20 on ..	Rs. 15 on ..	Rs. 3 on ..	Rs. 15 off ..	Rs. 25 off ..	Par ..	Rs. 22 off.
Basis .. ..	.. ..	Rs. 242 ..	Rs. 162 ..	Rs. 168 ..	F. G. M. G. Broach .. No. 2, July/Aug. 1933 dely., Rs. 207.	F. G. M. G. Broach .. Hedge Contract No. 2, April/May 1935 dely., Rs. 224.	F. G. M. G. Broach .. Hedge Contract No. 2, July/August 1935 dely., Rs. 224.	F. G. M. G. Broach .. Hedge Contract No. 2, July/Aug. 1936 dely., Rs. 228.
Date of Valuation .. ..	.. ..	8-6-30 ..	10-8-31 ..	13-7-32 ..	26-7-33 ..	20-8-34 ..	20-8-35 ..	8-8-36.
Remarks .. ..	.. ..	..	..	..	..	..	..	..

Table 19.—SPINNING TEST RESULTS FOR BIJAPUR COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton	Season	Date of Spinning	Counts Nominal	Weight of Sample lbs.	WASTE PERCENTAGES				RING FRAME PARTICULARS*				YARN TEST RESULTS							TEMPERATURE (°F.)	RELATIVE HUMIDITY (%)				
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	LEA			BALASTIC					Neeps per yard.	Turns Actual. per inch	Spinning Room.	Weaving Room.
															Counts Actual.	Strength (lbs.)	Count Strength	Counts Actual.	Work up to 100 lb. (inch-lb.)	Count Work						
760	Bijapur	1929-30	18-6-30	20A	10	11.5	9.0	0.6	22.7	50	186	..	4.81	17.93	19.5	63.5	1277	20.2	102.0	2000	1	1.5	17.0	90	61	70
760	Bijapur	1929-30	19-6-30	20C		..	..	..	..	35	197	..	5.00	20.23	19.6	76.1	1401	19.9	111.0	2260	4	1.7	19.5	92	61	70
1166	Bijapur	1930-31	15-8-31	20A	10	12.3	11.0	0.6	22.6	91	157	7760	5.83	17.93	19.4	53.8	1044	19.0	101.2	2074	5	2.0	17.2	86	78	70
1166	Bijapur	1930-31	15-8-31	20C		..	..	..	..	86	179	9700	5.05	20.23	20.3	59.8	1211	20.1	103.0	2101	5	1.7	19.2	86	70	81
1397	Bijapur	1931-32	21-7-32	12	10	16.9	13.0	0.6	28.1	51	188	7260	4.13	13.92	12.2	98.7	1504	12.0	203.1	2105	3	1.8	13.6	87	70	80
1397	Bijapur	1931-32	19-7-32	10		..	..	..	..	48	176	7800	5.22	15.97	15.8	63.7	1038	10.1	124.0	1906	1	1.5	15.4	80	70	70
1892	Bijapur	1932-33	4-0-33	10	10	18.1	9.5	0.6	26.4	102	182	8000	5.13	15.97	10.0	70.0	1130	10.1	125.0	2022	4	0.5	15.1	80	72	70
1892	Bijapur	1932-33	4-0-33	20A		..	..	..	..	188	181	9000	5.81	17.98	10.1	65.8	1083	10.0	102.8	2015	5	1.0	17.0	87	70	75
2474	Bijapur	1933-34	5-0-34	10	10	13.1	13.0	0.4	24.8	18	192	8250	5.43	15.97	15.6	92.1	1137	15.7	148.0	2324	4	1.8	15.1	85	78	78
2474	Bijapur	1933-34	5-0-34	20A		..	..	..	..	57	187	9200	5.81	17.98	10.7	64.3	1267	19.9	107.2	2133	5	1.5	17.2	84	77	73
2842	Bijapur	1934-35	5-0-35	10	10	11.0	12.8	0.3	23.4	42	193	8700	5.43	15.97	16.2	99.0	1001	15.9	182.4	2900	3	1.0	15.4	85	74	70
2842	Bijapur	1934-35	10-0-35	20A		..	..	..	..	31	177	8760	5.57	17.98	10.3	81.5	1573	19.2	133.8	2600	1	0.8	17.0	89	70	82
2842	Bijapur	1934-35	12-0-35	20B		..	..	..	..	16	190	9400	5.68	19.26	20.0	81.4	1612	19.9	123.4	2498	3	1.5	18.1	85	73	70
3324	Bijapur	1935-36	19-8-36	14	10	11.9	10.6	0.3	21.5	22	198	8600	5.55	14.98	11.7	81.1	1192	14.5	182.4	2945	3	0.8	11.0	80	72	75
3324	Bijapur	1935-36	20-8-36	16		..	..	..	..	12	194	8450	0.25	15.97	16.2	71.8	1100	19.2	146.8	2392	3	0.5	15.1	85	74	70
3324	Bijapur	1935-36	19-8-36	20B		..	..	..	..	21	194	10200	5.60	19.26	19.7	68.7	1353	20.0	116.2	2334	3	1.0	18.7	86	72	70

* Diameter of ring frame front roller—F. Diameter of rings—1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample upon undermill conditions it would be less than shown here.

20.—BAGALKOTE COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
761	Bagalkote	Bagalkote	1929-30
1157	"	"	1930-31
1433	"	"	1931-32
1893	"	"	1932-33
2460	"	"	1933-34
2840	"	"	1934-35
3391	"	"	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1. possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

	BAGALKOTE.												
	1929-30.		1930-31.		1931-32.		1932-33.		1933-34.		1934-35.		1935-36.
Colour	Creamy ..	Creamy ..	Creamy-white	Creamy ..	Dullish creamy	Creamy ..	Creamy-white.						
Cleanliness	Very leafy ..	Leafy ..	Leafy; slightly stained.	Somewhat stained; leafy.	Leafy ..	Leafy ..	Leafy.						
Feel	Good ..	Good ..	Good ..	Good ..	Good ..	Fairly good	Good.						
Ginning and neppiness ..	Fairly well-ginned.	..	Well-ginned ..	Fairly well-ginned.	..	Good deal knotted and nepped by ginning.	Well-ginned.						
Seeds	1.8% seeds ..	A fair amount of out seed; 1.9% ginned and unginned.	0.75% unginned.	1/2% ginned and unginned.	2.97% partly ginned seeds and kapas.	..	1.38% full clean seeds.						
Card Sliver .. ..	..	Fairly clean ..	Almost clean ..	Clean ..	A little leafy	Fairly clean ..	A little leafy.					
Card Web .. ..	..	Even and free of nep.	Fairly good ..	Even and nep-free.	..	Somewhat neppy.	Good.					
Weight of 10 flat strips ..	15.5 grams ..	21.2 grams ..	10.2 grams ..	10.5 grams ..	24.4 grams ..	27.0 grams ..	17.5 grams.						
Remarks .. ..	..	A trifle knotty.	Ring frame run at unusually low speed due to excessive breakages.	..	..	..	..		

(b) *Yarn* :—

		BAGALKOTE.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	.. ..	Clean ..	Slightly leafy	Fairly clean ..	Clean ..	Almost clean ..	Fairly clean ..	A little leafy.
Evenness	.. ..	Fairly even	Fairly even	Unusually uneven.	Fairly even	Fairly even	Even ..	Even.
Neppiness	.. ..	Free of nep	Fairly free of nep.	Almost nep-free	Almost free of nep.	Almost free of nep.	Somewhat neppy.	Almost free of nep.
Slubbiness	.. ..	..	..	A good deal slubby.	..	..	A trifle slubby.	..

3. *Spinning Test Details and Results* :—See Table 20 on page 60.

II.—REPORT OF THE STANDARDS COMMITTEE FOR BAGALKOTE COTTON.

BAGALKOTE.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under ..	F. G. M. G. Broach.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, July/Aug. 1933 delivery.	F. G. M. G. Broach Hedge No. II	F. G. M. G. Broach Hedge No. 2, July/Aug. 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1937 delivery.
Class	Fine.	Fine.	Fine.	Fully good.	Fine.	Fine.	Fine.
Colour	Reddish.	Greyish creamy.	Dullish brown.	Brown.	Brownish.	Brownish white.	Creamy brown.
Staple Length ..	13/16 inch.	27/32 inch.	3/4 inch.	11/16 inch.	Barely 3/4 inch.	13/16 inch.	13/16 inch.
Staple Strength ..	Fair.	Fair.	Fair.	Good.	Fair.	Fair.	Good.
Regularity	Irregular.	Irregular.	Irregular.	Regular.	Fair.	Fair.	Regular.
Value above or below contract rate	Rs. 25 on.	Rs. 20 on.	Per.	Par.	Rs. 15 off.	Rs. 20 on.	Rs. 5 off.
Basic	Rs. 242.	Rs. 162.	Rs. 172.	F. G. M. G. Broach No. 2, July/Aug. 1933 delivery, Rs. 207.	F. G. M. G. Broach H. C. No. II, July/August 1934 deliv., very, Rs. 226.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1935 delivery, Rs. 224.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1937 delivery, Rs. 221.
Date of Valuation ..	6-6-30.	10-8-31.	28-7-32.	26-7-33.	13-8-34.	20-8-35.	28-8-36.
Remarks .. ..	..	..	..	..	..	..	..

Table 20.—SPINNING TEST RESULTS FOR BAGALKOTE COTTON.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.				TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).						
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R. P. M.	Spindle Speed R. P. M.	Draft.	Turns per Inch.	Counts Actual.	L.E.		Count-Work (Inch-lb.).	Count-Work Product.				Evenness Class.	Neps per yard.	Turns per Inch Actual.	Spiraling Room.	Testing Room.
																Count-Work (Inch-lb.).	Count-Work Product.										
761	Bagalkote ..	1929-30	18-6-30	20A	10	14.5	9.3	0.6	23.0	65	186	..	5.00	17.08	10.7	69.6	1371	19.7	112.4	2214	4	1.7	17.0	64	70		
761	Bagalkote ..	1929-30	18-6-30	20C	..	..	..	..	..	35	197	..	5.10	20.23	19.7	78.4	1644	19.0	111.6	2221	4	2.0	19.4	61	75
1157	Bagalkote ..	1930-31	14-8-31	20A	10	13.6	12.2	0.5	24.5	57	164	8100	6.05	17.08	10.9	57.0	1134	20.3	104.6	2123	5	2.2	17.3	73	80		
1157	Bagalkote ..	1930-31	14-8-31	20C	..	..	..	..	..	63	190	10850	6.10	20.23	20.0	66.1	1822	20.2	106.8	2157	4	2.0	19.4	74	79
1433	Bagalkote ..	1931-32	26-8-32	12	9	13.7	14.8	0.8	27.1	124	164	6000	4.90	14.68	12.0	56.6	679	12.1	184.8	2236	5	1.2	14.2	70	72		
1433	Bagalkote ..	1931-32	25-8-32	16B	..	..	..	..	..	150	130	6000	5.00	16.97	15.8	34.3	542	15.9	117.6	1870	6	1.5	16.3	71	70
1433	Bagalkote ..	1931-32	26-8-32	20C	..	..	..	..	..	173	110	6200	5.81	20.23	19.2	25.8	405	18.8	95.4	1794	7	1.0	19.4	70	69
1893	Bagalkote ..	1932-33	4-9-33	16A	10	13.8	11.7	0.3	24.1	65	182	8000	5.23	15.07	15.6	93.3	1455	16.0	137.2	2105	4	1.5	15.3	72	74		
1893	Bagalkote ..	1932-33	4-9-33	16B	..	..	..	..	..	18	193	8800	5.34	16.07	15.8	98.4	1655	16.0	147.4	2353	4	1.8	16.6	67	78
2460	Bagalkote ..	1933-34	23-8-34	16A	10	15.0	14.0	0.3	27.1	112	188	8250	5.53	15.07	16.4	84.5	1386	16.4	138.2	2266	4	1.8	15.5	84	80		
2460	Bagalkote ..	1933-34	22-8-34	20A	..	..	..	..	..	117	175	8450	5.83	17.08	19.0	64.6	1286	10.7	100.4	2156	4	2.2	17.3	78	78
2460	Bagalkote ..	1933-34	22-8-34	20B	..	..	..	..	..	21	188	9800	5.83	19.26	19.8	56.2	1113	10.8	112.4	2226	4	2.0	18.8	74	74
2840	Bagalkote ..	1934-35	3-9-35	16A	10	11.2	13.2	0.3	24.9	118	193	8500	5.55	15.07	16.7	110.2	1840	16.4	102.8	3102	3	4.0	15.4	73	73		
2840	Bagalkote ..	1934-35	3-9-35	20A	..	..	..	..	..	10	180	8550	5.93	17.08	20.5	79.7	1634	20.4	130.4	2660	4	3.5	17.2	77	72
2840	Bagalkote ..	1934-35	3-9-35	20B	..	..	..	..	..	5	186	9000	5.93	19.26	20.0	90.0	1800	20.1	133.6	2685	4	2.8	18.5	74	71
2840	Bagalkote ..	1934-35	17-9-35	24	..	..	..	..	..	36	176	9650	7.22	10.73	25.5	56.6	1443	25.4	97.0	2464	4	3.2	19.0	76	70
3391	Bagalkote ..	1935-36	7-10-36	16	10	14.5	12.2	0.4	26.2	12	194	8800	5.43	15.07	16.1	85.7	1380	16.4	138.2	2266	3	1.2	15.0	72	70		
3391	Bagalkote ..	1935-36	5-10-36	20A	..	..	..	..	..	10	176	8500	5.95	17.08	20.1	61.2	1230	20.0	108.4	2233	4	1.2	17.2	70	71
3391	Bagalkote ..	1935-36	6-10-36	20B	..	..	..	..	..	42	194	10200	6.07	19.26	20.1	72.2	1451	20.3	110.6	2278	4	1.0	18.3	70	72

* Diameter of ring-frame front roller—7/8". Diameter of rings—1.5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

21.—CAMBODIA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
762	Cambodia.	Coimbatore.	1929-30.
1159	"	Tirupur.	1930-31.
1398	"	"	1931-32.
1894	"	"	1932-33.
2436	"	"	1933-34.
2839	"	"	1934-35.
3390	"	"	1935-36.

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room.*—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal Cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper Feeder, Scutcher (3 times).

(b) *Card-room.*—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

		CAMBODIA.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white to creamy; bright.	Creamy-white; bright.	Creamy-white; bright.	Creamy-white; bright.	White to creamy-white; bright.	White to creamy-white; bright.	White to creamy-white; bright.	
Cleanliness	Clean.	Fairly clean.	Clean.	Clean.	Clean.	Clean.	Clean.	
Feel	Good-bodied.	Very good.	Good.	Good-bodied.	Good.	Softish smooth.	Good-bodied.	
Ginning and Neppiness	Nepped and knotted.	Well-ginned.	Fairly well-ginned.	Fairly well-ginned.	A little knotted in ginning.	A little knotted in ginning.	Fairly well-ginned.	
Seeds .. ..	.. ..	.. ..	.. ..	.. ..	1% full seeds.	Some unginned.	.. ..
Card Sliver .. ..	.. ..	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Card Web	A little neppy.	A trifle neppy.	Fairly good.	Fairly good.	Even and somewhat neppy.	Fairly good.	A little neppy.	
Weight of 10 flat strips	22.1 grams.	25.3 grams.	22.2 grams.	27.8 grams.	28.8 grams.	31.0 grams.	21.2 grams.	
Remarks .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

(b) Yarn :—

		CAMBODIA.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	.. ..	Clean	Clean	Clean	Clean	A little leafy ..	Clean	Almost clean.
Evenness	.. ..	Fairly even ..	Even	Even	Fairly even ..	Fairly even ..	Even	Even in the 20's only.
Neppiness	.. ..	Fairly neppy ..	A little neppy ..	A little neppy ..	Somewhat neppy.	Somewhat neppy.	Somewhat neppy.	Fairly neppy.
Stubbiness	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

3. *Spinning Test Details and Results* :—See Table 21 on page 63.

II.—REPORT OF THE STANDARDS COMMITTEE FOR CAMBODIA COTTON.

[illegible]

Table 21.—SPINNING TEST RESULTS FOR CAMBODIA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Servon.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE AVERAGE (°F.).	RELATIVE HUMIDITY (%).	
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages Per 100 spindles per hour.	Front Roller Speed	Spindle Speed	Draft.	Turns per Inch.	LZL.			BALISTIC.			Tenseness Class.	Neps per Yard.	Turns per Inch Actual.	Spinning Room.	Testing Room.			
													Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inches).	Count-Work Product.								
762	Cambodia ..	1929-30	19-6-30	24	10	5.6	11.3	0.6	10.7	16	175	9700	5.05	10.73	23.0	64.8	1520	23.0	102.1	2417	4	5.5	19.0	91	60	74
763	Cambodia ..	1929-30	20-6-30	30A	..	..	..	..	..	30	160	..	7.50	21.86	30.0	46.4	1392	30.0	68.0	2058	5	5.7	21.1	89	65	76
1159	Cambodia ..	1930-31	18-8-31	24	10	5.8	12.6	0.5	18.0	31	180	9700	5.91	10.73	23.3	73.0	1722	23.3	118.8	2703	3	3.5	18.8	84	70	82
1159	Cambodia ..	1930-31	18-9-31	30B	..	..	..	..	..	22	160	9700	7.38	23.11	30.1	53.6	1613	29.5	90.4	2607	4	4.7	22.1	81	78	80
1398	Cambodia ..	1931-32	20-7-32	24	10	5.6	14.7	0.4	19.8	20	178	9600	5.70	10.73	23.5	68.6	1612	23.5	113.0	2678	3	2.8	19.2	85	77	78
1398	Cambodia ..	1931-32	20-7-32	30A	..	..	..	..	..	26	158	9650	7.22	21.86	29.5	51.4	1510	29.5	86.0	2555	4	3.6	21.4	86	76	82
1894	Cambodia ..	1932-33	30-8-33	24	10	6.5	13.8	0.4	18.9	55	178	9600	6.53	10.73	23.6	65.0	1518	24.2	110.0	2662	4	3.5	19.1	87	70	66
1894	Cambodia ..	1932-33	30-8-33	30A	..	..	..	..	..	76	162	9700	7.03	21.86	29.0	45.2	1351	30.1	82.2	2474	5	3.8	20.6	86	68	68
2436	Cambodia ..	1933-34	9-8-34	20	10	7.5	14.6	0.1	21.3	10	197	9550	5.81	17.93	20.0	83.6	1672	20.0	133.2	2664	3	5.2	17.3	84	80	82
2436	Cambodia ..	1933-34	9-8-34	30A	..	..	..	..	..	43	162	9500	6.71	21.86	30.8	46.4	1429	30.7	83.0	2548	5	4.2	21.4	84	80	82
2436	Cambodia ..	1933-34	9-8-34	34	..	..	..	..	..	48	146	9050	7.43	23.55	33.7	39.6	1335	33.7	75.0	2528	6	4.5	22.6	84	80	83
2839	Cambodia ..	1934-35	4-9-35	20	10	6.0	14.8	0.2	19.2	5	197	9700	6.07	17.93	20.2	91.2	1842	20.6	134.1	2700	3	3.8	17.1	85	72	72
2839	Cambodia ..	1934-35	4-9-35	30A	..	..	..	..	..	13	158	9700	6.23	21.86	20.8	54.5	1624	20.7	88.0	2631	4	3.5	21.1	86	72	74
2839	Cambodia ..	1934-35	5-9-35	34	..	..	..	..	..	12	151	9700	7.14	23.56	33.2	47.1	1564	33.6	80.8	2707	5	3.5	22.0	86	71	76
3390	Cambodia ..	1935-36	5-10-36	20	10	6.5	12.1	0.3	17.2	0	196	9550	6.07	17.93	20.0	90.2	1804	20.0	133.4	2608	3	3.5	17.3	89	60	72
3390	Cambodia ..	1935-36	6-10-36	30A	..	..	..	..	..	13	160	9400	6.63	21.86	29.3	57.0	1670	29.5	90.0	2565	5	3.2	20.9	80	72	73
3390	Cambodia ..	1935-36	7-10-36	34	..	..	..	..	..	12	140	9400	7.57	23.56	33.2	46.0	1327	32.7	77.2	2521	5	3.8	22.2	80	70	73

* Diameter of ring frame front roller—7/8". Diameter of rings—1.5/8". † It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

22.— TINNEVELLY COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
797	Tinnevelly.	Tuticorin.	1929-30
1162	"	"	1930-31
1400	"	"	1931-32
1883	"	"	1932-33
2461	"	"	1933-34
2841	"	"	1934-35
3302	"	Virudanagar.	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	TINNEVELLY.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white, fairly bright.	Creamy-white.	White to creamy-white; brightish.	White to creamy-white; bright.	Creamy-white, bright.	White to creamy-white; bright.	White to creamy-white.
Cleanliness	Fairly clean; a little stained.	Fairly clean; occasional spots of stain.	Fairly clean.	Clean.	Fairly clean.	Fairly clean.	Somewhat stained; a little leafy.
Feel	Good soft.	Soft but good.	Good.	Good.	Smooth and bodied.	Good.	Good-bodied.
Ginning and neppiness	Fairly knotted and nepped.	Fairly well-ginned.	Fairly well-ginned.	Well-ginned.	Slightly knotted.	Well-ginned.	A little knotted.
Seeds	0.75% fully clean.	..	..	..	..	..	..
Card sliver .. ..	..	Practically clean.	Almost clean.	Clean.	Fairly clean.	Clean.	Almost clean.
Card web	Cloudy and neppy.	Even and free of nep.	Almost nep-free.	Good.	A little neppy.	Good.	Good.
Weight of 10 flat strips	23.2 grams.	19.0 grams.	20.6 grams.	22.4 grams.	27.2 grams.	26.1 grams.	16.7 grams.
Remarks .. ..	..	..	..	..	..	..	..

(b) Yarn :—

	TINNEVELLY.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Leafy.	A trifle leafy.	Clean.	Clean.	Almost clean.	Fairly clean.	Fairly clean.
Evenness	Fairly even.	Fairly uneven.	Fairly even.	Fairly even.	Fairly even.	Even.	Even.
Neppiness	Very neppy.	Neppy.	Free of nep.	Free of nep.	Fairly neppy.	Fairly free of nep.	A little neppy.
Slubbiness .. ..	..	..	..	..	..	Somewhat slubby.	..

3. *Spinning Test Details and Results* :—See Table 22 on page 66.

II--REPORT OF THE STANDARDS COMMITTEE FOR TINNEVELLY COTTON.

TINNEVELLY.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	F.G.M.G. Broach F.G.M.G. Broach No. 2.	F.G.M.G. Broach F.G.M.G. Broach No. 2.	F.G.M.G. Broach F.G.M.G. Broach No. 2.	F.G.M.G. Broach F.G.M.G. Broach No. 2, July/Aug. 1933 delivery.	F.G.M.G. Broach Hedge Contract No. 2.	F.G.M.G. Broach Hedge Contract No. 2, July/Aug. 1935 delivery.	F.G.M.G. Broach Hedge Contract No. 2, April/May 1937 delivery.
Class	Good.	Fully good to fine.	Superfine.	Superfine.	Strict Fully good.	Fine.	Fully good to fine.
Colour	Creamy dull.	Creamy grey.	Creamy white.	Grayish-white.	Creamy white.	Whitish.	Creamy white.
Staple Length	31/32 inch.	3/4 inch.	7/8 inch.	13/16 inch.	Full 13/16 inch.	3/4 inch.	3/4 inch.
Staple Strength..	Very good.	Weak.	Fair.	Good.	Fair.	Fair.	Fair.
Regularity	Irregular.	Very irregular.	Regular.	Regular.	Irregular.	Irregular.	Irregular.
Value above or below contract rate	Rs. 80 on.	Rs. 30 on.	Rs. 25 on.	Rs. 40 on.	Rs. 25 on.	Rs. 30 on.	Rs. 5 on.
Basis	F.G.M.G. Broach.	Rs. 143.	Rs. 168.	F.G.M.G. Broach No. 2, July/Aug. 1933 delivery. Rs. 207.	F.G.M.G. Broach Hedge Contract No. 2, July/Aug. 1934 delivery. Rs. 220.	F.G.M.G. Broach Hedge Contract No. 2, July/Aug. 1935 delivery. Rs. 224.	F.G.M.G. Broach Hedge Contract No. 2, April/May 1937 delivery. Rs. 221.
Date of Valuation	16-7-30.	25-8-31.	13-7-32.	20-7-33.	13-8-34.	20-8-35.	28-9-36.
Remarks	..	Poor style for this growth.	..	..	..	..	..

Table 22.—SPINNING TEST RESULTS FOR TINNEVELLY COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*					YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).	Testing Room.
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	LEA.			BALISTIC.			Evenness Class.	Neps per yard.	Turns per Inch Actual.				
															Counts Actual.	Strength (lbs.).	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count-Work Product.							
707	Tinnevely ..	1929-30	24-7-30	20A	10	8.0	12.4	0.4	10.8	36	176	..	5.21	17.98	19.5	75.5	1472	10.7	122.8	2410	4	14.5	17.1	86	76	78	
707	Tinnevely ..	1929-30	24-7-30	20C	10	..	..	..	..	30	102	..	5.21	20.23	19.5	83.1	1020	10.7	123.2	2427	4	13.0	19.2	87	71	73
1162	Tinnevely ..	1930-31	2-0-31	10	10	6.4	10.3	0.6	16.6	100	152	7350	5.95	15.97	15.6	53.9	841	15.6	127.8	1094	4	6.2	15.6	85	75	80	
1400	Tinnevely ..	1931-32	21-7-32	12	10	5.9	11.7	0.5	17.3	100	188	7250	5.00	13.92	12.4	84.4	1046	12.2	200.2	2442	4	0.8	13.3	82	76	80	
1400	Tinnevely ..	1931-32	21-7-32	16	..	..	..	..	..	104	102	7300	5.35	15.97	15.6	83.0	983	15.5	147.2	2292	4	1.2	15.3	88	74	85
1853	Tinnevely ..	1932-33	18-8-33	12	10	6.7	11.4	0.3	17.6	15	198	7650	5.00	13.92	12.1	105.8	1290	12.3	206.8	2544	3	1.0	13.1	87	60	70	
1853	Tinnevely ..	1932-33	18-8-33	16	..	..	..	..	..	36	180	8000	5.11	15.97	15.4	78.4	1207	15.8	170.0	2686	4	1.2	15.4	80	70	72
2401	Tinnevely ..	1933-34	23-8-34	16	10	0.0	13.7	0.2	19.5	0	188	8250	5.67	15.97	10.3	82.3	1341	16.1	135.6	2505	4	5.5	15.4	84	77	80	
2401	Tinnevely ..	1933-34	22-8-34	20A	..	..	..	..	..	36	176	8150	5.95	17.98	20.1	56.9	1144	20.2	116.2	2327	4	4.0	17.3	84	77	78
2401	Tinnevely ..	1933-34	22-8-34	20B	..	..	..	..	..	16	198	9800	5.83	19.20	10.4	75.2	1439	10.5	124.4	2420	4	4.8	18.6	85	74	74
2541	Tinnevely ..	1934-35	5-0-35	10	10	5.3	13.1	0.4	18.0	67	194	8600	5.32	15.97	16.3	71.4	1104	16.0	148.6	2378	3	1.5	15.4	85	76	73	
2541	Tinnevely ..	1934-35	9-0-35	20A	..	..	..	..	..	62	176	8750	5.83	17.98	20.2	48.6	982	20.1	111.2	2236	4	1.2	17.2	86	70	76
2541	Tinnevely ..	1934-35	9-0-35	20B	..	..	..	..	..	88	185	9650	5.83	19.20	20.4	61.8	1261	20.3	110.6	2367	4	1.5	18.0	86	71	82
3302	Tinnevely ..	1935-36	7-10-36	16	10	6.2	10.5	0.2	16.2	0	195	8800	5.54	15.97	15.0	103.6	1016	15.3	195.4	3036	3	2.8	15.2	89	72	70	
3302	Tinnevely ..	1935-36	8-10-36	20A	..	..	..	..	..	10	181	8950	5.95	17.98	19.6	78.9	1246	19.8	129.2	2538	3	3.2	17.3	80	69	70

* Diameter of ring frame front roller—1".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

23.—KARUNGANNI COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
763	Karunganni.	Tuticorin.	1929-30
1160	"	Virudanagar.	1930-31
1399	"	Tuticorin.	1931-32
1895	"	"	1932-33
2476	"	Tirupur.	1933-34
2843	"	Tuticorin.	1934-35
3393	"	Virudanagar.	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive) :—Poreupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KARUNGANNI.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy white; bright.	Creamy white; bright.	Creamy white; brightish.	White to creamy white; bright.	White to creamy white; brightish.	White to creamy white; bright.	White to creamy white; bright.
Cleanliness	Clean.	Fairly clean.	Almost clean.	Clean.	Fairly clean.	Fairly clean.	Clean; a little stained.
Feel	Good soft.	Good.	Good.	Good-bodied.	Good soft.	Good smooth.	Good smooth.
Ginning and neppiness ..	Badly strung and nepped.	Well-ginned.	Well-ginned apart from some knot-tiness.	Well-ginned.	Slightly knotted in ginning.	Fairly well-ginned.	Well-ginned.
Seeds .. .. .	..	..	..	..	..	..	..
Card Sliver .. ..	..	Almost clean.	Clean.	Clean.	Fairly clean.	Almost clean.	Fairly clean.
Card Web	Fairly neppy.	Practically free of nep.	Fairly good.	Good.	Somewhat neppy.	Good.	Good.
Weight of 10 flat strips ..	19.8 grams.	21.7 grams.	20.7 grams.	19.6 grams.	26.3 grams.	28.0 grams.	15.3 grams.
Remarks .. .. .	..	..	..	..	..	..	..

(b) Yarn :—

	KARUNGANNI.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean.	Practically clean.	Clean.	Clean.	Fairly clean.	Clean.	Almost clean.
Evenness	Fairly even.	Fairly even.	Fairly even.	Fairly even.	Even.	Fairly even.	Even.
Neppiness	Neppy.	Somewhat neppy.	Somewhat neppy.	Free of nep.	Somewhat neppy.	Fairly neppy.	Fairly neppy.
Slubbiness .. .. .	..	..	..	A trifle slubby.	..	A trifle slubby.	..

3. *Spinning Test Details and Results* :—See Table 23 on page 69.

III—REPORT OF THE STANDARDS COMMITTEE FOR KARUNGANNI COTTON.

KARUNGANI.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	F. G. M. G. Broach.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, July/August 1933 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1935 delivery.	S. M. G. Broach Hedge Contract No. 2, July/August 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1937 delivery.
Class	Fine.	Fine.	Extra superfine.	Superfine.	About fine.	Strict fine.	Fine.
Colour	Slight creamy.	White to creamy.	Whitish.	Slightly creamy-white.	Creamy.	Whitish.	Creamy-white.
Staple Length	7/8 inch.	15/16 inch.	15/16 inch.	7/8 inch.	7/8 inch.	7/8 inch.	7/8 inch.
Staple Strength	Fair.	Good.	Good.	Good.	Fair.	Good.	Fair.
Regularity	Irregular.	Regular.	Regular.	Regular.	Fair.	Irregular.	Regular.
Value above or below contract rate	Ra. 75 on.	Ra. 55 on.	Ra. 35 on.	Ra. 45 on.	Ra. 35 on.	Ra. 50 on.	Ra. 20 on.
Basis	Ra. 242.	Ra. 162.	Ra. 108.	F. G. M. G. Broach No. 2, July/August 1933 delivery, Rs. 207.	F. G. M. G. Broach H. C. No. 2, April/May 1935 delivery, Rs. 224.	F. G. M. G. Broach Hedge Contract No. 2, July/August 1935 delivery, Rs. 224.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1937 delivery, Rs. 231.
Date of Valuation	6-6-30.	10-8-31.	13-7-32.	20-7-33.	20-8-34.	20-8-35.	28-9-36.
Remarks							

Table 23.—SPINNING TEST RESULTS FOR KARUNGANNI COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS						TEMPERATURE (°F).	RELATIVE HUMIDITY (%).						
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakage per 100 spindles per hour.	Front Roller Speed H.P.M.	Spiral Speed H.P.M.	Draft.	Turns per Inch.	Counts Actual.	Strength (lbs.).	Count-Stretch.	Ballistic.				Kevlar (Tens.).	Neps per yard.	Turns per inch Actual.	Spiraling Room.	Twisting Room.	
																		Work of Machine (lb.-ft.)	Count Work Product.								Revolutions (ft.)
703	Karunganni	1929-30	20-6-30	20A	10	5.5	10.1	0.4	15.3	35	189	..	5.10	17.93	19.4	70.6	1149	129.4	2165	4	6.0	16.8	90	61	77		
703	Karunganni	1929-30	20-6-30	20B		..	..	..	..	15	199	..	5.20	20.25	19.5	87.9	1214	135.0	2419	4	7.0	19.2	91	64	73
1100	Karunganni	1930-31	17-8-31	20A	10	5.9	11.0	0.6	19.8	67	190	9100	5.95	17.93	20.4	62.5	1275	120.8	2162	4	2.5	17.2	84	79	82		
1100	Karunganni	1930-31	18-8-31	24		..	..	..	..	71	160	9000	6.07	19.73	23.6	50.1	1231	101.4	2538	5	5.0	19.0	85	77	79
1309	Karunganni	1931-32	20-7-32	20A	10	5.8	11.4	0.6	17.0	125	186	9300	5.41	17.93	19.9	61.3	1260	117.2	2307	4	3.0	17.2	87	70	83		
1309	Karunganni	1931-32	21-7-32	24		..	..	..	..	119	129	8300	6.13	19.73	23.7	50.9	1206	101.4	2153	5	3.2	18.9	86	77	85
1805	Karunganni	1932-33	29-8-33	10	10	6.9	10.6	0.6	17.2	152	181	8200	5.37	15.97	15.7	63.4	1040	127.6	2019	4	0.5	15.3	87	64	69		
1805	Karunganni	1932-33	30-8-33	20A		..	..	..	..	223	166	8000	5.33	17.93	19.5	50.0	975	106.2	2071	5	1.0	17.2	83	67	63
2476	Karunganni	1933-34	5-9-34	10	10	7.5	13.3	0.3	20.1	6	192	8250	5.53	15.97	16.0	91.2	1507	163.2	2535	3	3.5	15.5	85	78	74		
2476	Karunganni	1933-34	5-9-34	20A		..	..	..	..	52	189	9250	6.22	17.93	20.1	63.9	1241	115.6	2312	4	4.0	17.3	83	91	71
2943	Karunganni	1934-35	9-9-35	10	10	6.2	13.8	0.3	19.4	30	193	8700	5.64	15.97	16.2	114.8	1460	209.6	3312	4	3.2	15.5	96	71	80		
2943	Karunganni	1934-35	10-9-35	20A		..	..	..	..	16	194	9500	5.95	17.93	19.9	91.9	1610	159.6	2406	4	3.8	17.4	84	71	83
3303	Karunganni	1935-36	7-10-36	10	10	4.4	9.5	0.4	13.8	21	200	8400	5.51	15.97	15.7	107.1	1631	207.2	3274	3	4.0	15.2	89	72	70		
3303	Karunganni	1935-36	8-10-36	20A		..	..	..	..	10	180	8400	5.95	17.93	19.7	86.2	1540	141.6	2413	3	3.9	17.2	89	72	72

* Diameter of ring frame front roller—7/8". Diameter of ring—1.5/8".

† It is to be noted that the total 1.94 lb. for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

24.—A. R. KAMPALA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Special Appeal Committee on African Cottons in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Season.
1130	A. R. Kampala (K.L.A.)	1930-31
1498	A. R. Kampala (K.L.A.)	1931-32
1898	A. R. Kampala (K.L.A.)	1932-33
2464	A. R. Kampala (K.L.A.)	1933-34
2848	A. R. Kampala (B.K.T.)	1934-35
3396	A. R. Kampala (K.L.A.)	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). The 1930-31 sample was passed only once through the Crighton.

1934-35 and 1935-36:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice).

(b) *Card-room*:—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KAMPALA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white; bright.	Creamy-white; brightish.	White; bright.	White to creamy-white; bright.	White to creamy-white.	White to creamy-white; brightish.
Cleanliness	Clean.	Very clean.	Clean.	Clean.	Clean.	Clean.
Feel	Good silky.	Good silky.	Good silky.	Smooth bodied.	Good smooth.	Good silky.
Ginning and neppiness.	Trifle too knotted and nepped.	A little knotted.	Some what knotted.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	Clean.	Clean.	Clean and silky.	Clean.	Clean.	Clean.
Card Sliver	Fairly neppy.	A little neppy.	A little neppy.	A little cloudy.	Good even.	Good.
Weight of 10 flat strips.	19.3 grams.	19.2 grams.	21.5 grams.	25.2 grams.	14.2 grams.	12.7 grams.
Remarks .. ..	..	..	..	..	..	..

(b) Yarn :—

	KAMPALA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Evenness	Even.	Even.	Very even.	Very even.	Very even.	Very even.
Noppiness	Some what neppy.	A trifle nappy.	Practically free of nep.	Fairly nappy.	Nep-free.	Some what neppy.
Remarks .. ..	..	..	..	..	..	..

3. Spinning Test Details and Results :—See Table 24 on page 72.

II.—REPORT OF THE SPECIAL APPEAL COMMITTEE ON AFRICAN A. R. KAMPALA COTTON.

		Kampala.			
		1929-31.	1931-32.	1931-31.	1931-30.
Contract valued under	.. ..	E. G. M. G. Branch No. 2	E. G. M. G. Branch No. 2	E. G. M. G. Branch No. 2	E. G. M. G. Branch No. 2
		April/May 1931	July/August 1931	July/August 1931	July/August 1931
	
Class .. ..	..	Superfine ..	Fully good ..	..	..
Colour .. ..	..	White ..	Brighter ..	..	..
Staple Length .. ..	..	1.16" ..	1.16" ..	1.16" ..	1.16" ..
Staple Strength .. ..	..	Good ..	Fair ..	..	..
Regularity .. ..	..	Regular ..	Regular ..	..	..
Value above or below contract rate	..	Rs. 115 on ..	Rs. 115 on ..	Rs. 115 on ..	Rs. 115 on ..
Basis .. ..	..	Rs. 177 ..	E. G. M. G. Branch No. 2	E. G. M. G. Branch No. 2	E. G. M. G. Branch No. 2
		..	April/May 1931	July/August 1931	July/August 1931
	
Date of Valuation .. ..	..	10.7.31 ..	10.7.31 ..	10.7.31 ..	10.7.31 ..
Remarks* .. ..	..	Good sample ..	..	..	..

* The difference between 'Fair' and 'Regular' is 10% and 15% in 1931-32 and 1931-30.

Table 24.—SPINNING TEST RESULTS FOR KAMPALA COTTON.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of sample (lbs.).	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.						TEMPERATURE. (°F.).		RELATIVE HUMIDITY. (%)					
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn breakages per 100 spindles	Front Roller Speed R. P. M.	Spindle Speed R. P. M.	Draft.	Turns per inch.	TRA.			BALISTIC.			Reinforces Class.		Keps per yard.	Turns per inch.	Spinning Room.	Spinning Room.	Testing Room.
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count-Work Product.							
1190	Kampala	1030-31	29-7-31	20	10	4.1	10.3	0.4	14.3	10	105	9750	5.75	17.98	10.5	115.0	2242	10.3	201.8	3804	2	2.7	17.2	87	73	82	
1190	Kampala	1030-31	29-7-31	30	10	..	..	..	..	0	150	9650	0.70	21.80	20.0	65.2	1049	20.8	107.2	3104	4	4.3	21.2	86	79	85
1190	Kampala	1030-31	30-7-31	40	10	..	..	..	..	8	138	9700	8.93	25.28	30.5	43.8	1730	30.5	80.2	3108	5	3.5	24.6	86	78	83
1408	Kampala	1031-32	10-10-32	20	10	3.9	10.4	0.3	14.1	0	190	9800	5.81	17.98	20.2	103.6	2153	20.2	103.4	3907	3	2.2	17.2	87	83	89	
1408	Kampala	1031-32	10-10-32	30	10	..	..	..	..	0	162	9700	6.41	21.80	20.5	63.4	1870	20.2	103.2	3130	4	2.2	21.3	87	68	87
1408	Kampala	1031-32	11-10-32	40	10	..	..	..	..	18	139	9700	8.97	25.28	40.5	38.7	1567	30.3	74.2	2916	5	3.0	24.2	87	67	84
1808	Kampala	1032-33	5-9-33	20	10	3.4	10.6	0.4	14.1	47	105	9900	6.07	17.98	20.6	91.4	1863	20.6	173.8	3983	2	1.2	17.3	86	75	76	
1808	Kampala	1032-33	9-9-33	30	10	..	..	..	..	3	160	9650	0.63	21.80	20.5	65.2	1923	20.8	111.0	3320	3	1.5	21.1	85	77	79
1808	Kampala	1032-33	9-9-33	40	10	..	..	..	..	15	128	9650	8.02	25.28	40.3	41.4	1068	30.0	81.0	3252	4	1.8	24.4	86	76	70
2464	Kampala	1033-34	21-8-34	20	10	5.0	12.0	0.1	17.1	5	205	10000	5.68	17.98	20.2	108.7	2196	20.2	103.4	3017	2	3.8	17.1	87	70	82	
2461	Kampala	1033-34	31-8-34	30	10	..	..	..	..	0	168	10000	0.63	21.80	30.0	63.7	1971	20.9	108.4	3242	3	4.2	20.7	86	71	82
2464	Kampala	1033-34	31-8-34	40	10	..	..	..	..	2	144	9900	8.71	25.28	30.2	44.1	1729	38.2	82.6	3150	4	5.2	24.3	86	72	80
2461	Kampala	1033-34	30-8-34	50	10	..	..	..	..	4	131	10000	10.19	28.10	40.7	31.2	1351	40.3	52.8	2003	5	4.8	27.1	86	72	81
2818	Kampala	1034-35	10-9-35	30	10	3.1	9.8	0.3	12.9	7	160	9550	7.00	21.80	20.7	61.6	1919	30.1	108.0	3251	3	0.8	21.1	85	70	70	
2818	Kampala	1034-35	11-9-35	40	10	..	..	..	..	13	138	9600	7.07	25.28	30.4	43.7	1722	30.2	68.0	3450	4	0.5	24.5	83	77	77
2818	Kampala	1034-35	13-9-35	50	10	..	..	..	..	14	120	9600	10.19	28.10	50.1	30.1	1303	30.0	53.8	2080	5	0.8	27.1	83	79	67
3306	Kampala	1035-36	9-10-36	30	10	3.4	9.3	0.2	11.6	0	173	10300	7.14	21.86	30.9	64.2	1984	31.1	104.2	3241	3	2.5	20.9	83	71	66	
3306	Kampala	1035-36	12-10-36	40	10	..	..	..	..	0	149	10400	7.81	25.28	40.1	43.3	1736	40.4	80.2	3240	4	3.0	24.1	88	65	62
3306	Kampala	1035-36	13-10-36	50	10	..	..	..	..	5	138	10400	10.00	28.10	50.5	31.4	1536	52.1	62.0	3250	5	2.8	26.9	88	71	66

* Diameter of ring frame front roller: 1 1/2".

† It is to be noted that the total loss is for a small sample weighing 10 lbs., for bulk sample spun under mill conditions it would be less than shown here.

25.—A. R. BUSOGA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Special Appeal Committee on African Cottons, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Season.
1131	A. R. Busoga (K.G.I.)	1930-31.
1499	A. R. Busoga (N.S.S.)	1931-32.
1897	A. R. Busoga (K.A.L.)	1932-33.
2463	A. R. Busoga (N.W.D.)	1933-34.
2847	A. R. Busoga (K.A.L.)	1934-35.
3395	A. R. Busoga (N.S.S.)	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). The 1930-31 sample was passed only once through the Crighton.

1934-35 and 1935-36:—Hopper bale opener, Horizontal Cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (twice).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	BUSOGA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white; very bright.	Brightish creamy-white.	White to creamy-white; brightish.	Creamy-white; bright.	Creamy-white; bright.	White to creamy-white; brightish.
Cleanliness	Clean	A few spots of stain.	Fairly clean ..	Clean	Clean	Clean.
Feel	Soft and silky.	Soft silky.	Soft silky.	Smooth-bodied.	Silky	Good silky.
Ginning and neppiness.	Knotted and nepped.	Somewhat knotted.	Fairly well-ginned.	Fairly knotted.	Well-ginned ..	Well-ginned.
Seeds	Too much cut.	.. ..	.. ..	.. ..	.. ..	.. ..
Card Sliver	Clean	Clean	Silky, bright and clean.	Clean	Clean	Clean. ..
Card Web	Much too neppy and uneven.	A trifle neppy.	Good	A little neppy.	Good	Good.
Weight of 10 flatstrips.	20.7 grams ..	18.4 grams ..	20.1 grams ..	22.5 grams ..	19.6 grams ..	14.4 grams.
Remarks .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

(b) Yarn :—

	BUSOGA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean	Clean	Clean	Clean	Clean	Clean.
Evenness	Even	Very even ..	Very even in the two lower counts.	Even	Even	Fairly even.
Neppiness	Fairly neppy ..	A little neppy.	Almost free of nep.	Fairly neppy ..	Fairly neppy ..	Neppy.
Remarks .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

3. *Spinning Test Details and Results* :—See Table 25 on page 75.

II. REPORT OF THE SPECIAL APPEAL COMMITTEE ON AFRICAN A. R. BUSOGA COTTON.

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BUSOGA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
Contract valued under
	F. G. M. G. Broach No. 2	F. G. M. G. Broach No. 2	F. G. M. G. Broach No. 2	F. G. M. G. Broach H.C.F. G. M. G. Broach	F. G. M. G. Broach
	April/May 1933 delv.	April/May 1933 delv.	July/Aug. 1933 delv.	No. 2; July/August 1934 delv.	Hedge Contract No. 2, April/May 1936 delv.
Class ..	Superfine ..	Fully good ..	Fine ..	Fully good to fine ..	Strict fine ..
Colour ..	White ..	Creamy-white ..	Dull-white ..	Dull-white and creamy ..	Creamy-white ..
Staple Length ..	1 1/8" ..	1 1/16" ..	1 1/16" ..	1 1/16" ..	Full 1 1/16" ..
Staple Strength ..	Good ..	Fair ..	Good ..	Good ..	Good ..
Regularity ..	Regular ..	Rather irregular ..	Fairly regular ..	Regular ..	Regular ..
Value above or below contract rate	..	Rs. 110 on ..	Rs. 138 on ..	Rs. 137 on ..	Rs. 135 on ..
Basis ..	..	..	..	..	..
	Rs. 177 ..	F. G. M. G. Broach No. 2, April/May 1933 delv., Rs. 218.	F. G. M. G. Broach No. 2, July/August 1933 delv., Rs. 205.	F. G. M. G. Broach H.C.F. G. M. G. Broach H.C.F. G. M. G. Broach H.C. No. 2, April/May 1936 delv., Rs. 194.	F. G. M. G. Broach H.C. No. 2, April/May 1937 delv., Rs. 221.
Date of Valuation ..	..	5-10-32 ..	7-8-33 ..	15-8-34 ..	28-9-35.
Remarks*	..	Fair average sample ..	..	..	Pass A. R. Busoga.

* The difference between 'Pass' and 'Rejection' standards in 1935-36 is Rs. 7.

Table 25.—SPINNING TEST RESULTS FOR BUSOGA COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Normal.	Weight of sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.						TENSILE STRENGTH (CF)		Elasticity (%)		
						Flow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller speed ft. per min.	Spiral speed ft. per min.	Draft.	Turns per inch	Lev.	Burr-free		Actual.	Neps per card.	Neps per inch.	Spiraling Room.		Spiraling Room.	
																Count (theoretical)	Count (actual)							
1131	Busoga	1930-31	29-7-31	20	8	5.3	12.3	0.0	17.4	20	135	9750	5.73	17.98	19.4	117.7	2276	19.8	5.7	17.1	87	71	85	71
1131	Busoga	1930-31	29-7-31	30						0	150	9650	0.07	21.86	29.5	69.1	2035	50.1	5.5	20.9	86	70	86	70
1131	Busoga	1930-31	30-7-31	40						16	174	9700	8.59	23.24	30.0	11.1	1720	51.2	5.5	21.5	86	70	85	70
1409	Busoga	1931-32	12-10-32	20	10	5.9	9.6	0.4	15.9	26	196	9700	5.95	17.94	20.7	107.9	2253	20.9	2.2	17.3	89	65	85	65
1409	Busoga	1931-32	11-10-32	30						10	161	9700	6.34	21.86	28.8	70.7	2022	24.6	2.2	21.2	85	63	83	63
1409	Busoga	1931-32	11-10-32	40						5	179	9700	8.51	25.24	29.3	45.1	1751	29.7	2.8	21.6	87	63	83	63
1897	Busoga	1932-33	5-9-33	20	10	7.5	10.0	0.5	17.1	88	199	9650	5.95	17.98	19.9	85.9	1771	20.1	1.0	17.7	70	74	70	70
1897	Busoga	1932-33	5-9-33	30						31	160	9600	6.47	21.86	29.1	71.8	1824	24.6	1.8	21.2	87	71	78	78
1897	Busoga	1932-33	8-9-33	40						21	194	9650	8.71	25.21	28.1	71.9	1841	28.1	1.5	21.4	88	73	75	75
2403	Busoga	1933-34	28-8-34	20	10	5.3	11.1	0.2	16.3	0	202	9600	5.41	17.44	20.7	111.5	2223	20.4	4.8	17.1	85	70	71	71
2403	Busoga	1933-34	28-8-34	30						3	169	9600	6.17	21.86	20.7	65.8	1971	20.1	4.5	20.6	86	71	75	75
2403	Busoga	1933-34	29-8-34	40						7	144	9400	8.35	23.28	31.1	40.8	1677	41.0	4.8	21.0	86	70	72	72
2403	Busoga	1933-34	30-8-34	50						2	131	9300	10.19	28.16	49.5	31.0	1571	50.3	4.0	20.9	86	72	74	74
2847	Busoga	1934-35	18-9-35	20	10	3.8	11.7	0.1	15.1	17	161	9650	7.79	21.86	20.2	12.1	2161	20.1	4.5	21.0	85	71	71	71
2847	Busoga	1934-35	19-9-35	40						6	138	9500	9.09	25.24	29.2	46.1	1413	40.1	4.2	21.4	83	80	79	79
2847	Busoga	1934-35	13-9-35	50						24	125	9200	10.06	28.16	49.9	32.8	1087	49.5	3.8	27.1	83	70	70	70
3395	Busoga	1935-36	9-10-36	20	10	3.8	9.5	0.3	13.2	7	171	10350	7.11	21.46	30.6	71.8	2107	31.5	3.5	20.9	87	71	69	69
3395	Busoga	1935-36	10-10-36	40						0	149	10100	7.55	25.24	33.5	50.0	1975	40.9	1.2	21.6	88	72	69	69
3395	Busoga	1935-36	11-10-36	50						5	196	10350	9.41	28.16	49.7	33.1	1770	50.9	4.5	27.1	84	70	65	65

* Diameter of ring frame front roller—7/8". Diameter of rings—1-5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

26.—A. R. JINJA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Special Appeal Committee on African Cottons, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average Cotton of the commercial crop.

Sample No.	Cotton.	Season.
1133	A. R. Jinja (K.I.G.)	1930-31
1500	A. R. Jinja (K.U.M.)	1931-32
1896	A. R. Jinja (A.R.A.)	1932-33
2462	A. R. Jinja (R.N.P.)	1933-34
2846	A. R. Jinja (S.R.I.)	1934-35
3394	A. R. Jinja (S.R.I.)	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times); the 1930-31 sample was passed only once through the Crighton.

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. I.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles while Ring Frame No. I possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	JINJA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white; bright.	Creamy-white.	White to creamy-white; brightish.	White to creamy-white; bright.	White to creamy-white; bright.	White to creamy-white; brightish.
Cleanliness	Fairly clean.	Fairly clean.	..	Clean.	Fairly clean.	Clean.
Feel	Soft and silky.	Good softish.	Soft silky.	Good silky.	Good silky.	Good silky.
Ginning and neppiness.	Too much knotted and nepped.	Some what knotted.	Fairly well-ginned.	A little knotted.	A good deal knotted and nepped.	Well-ginned.
Seeds .. ..	..	..	..	..	..	..
Card Sliver	Clean.	Clean.	Silky, soft and clean.	Clean.	Clean.	Clean.
Card Web	Too neppy.	A little neppy.	Good.	Cloudy and neppy.	Some what neppy.	Good.
Weight of 10 flat strips.	20.0 grams.	18.3 grams.	19.5 grams.	26.2 grams.	19.5 grams.	17.0 grams.
Remarks .. ..	..	..	..	..	..	..

(b) Yarn :—

	JINJA.					
	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36
Cleanliness	Fairly clean	Clean.	Clean.	Clean.	Fairly clean.	A trifle leafy.
Evenness	Even.	Even.	Very even.	Even.	Even.	Fairly even.
Neppiness	Neppy.	Some what neppy.	Practically free of nep.	Fairly neppy.	Neppy.	Neppy.
Slubbiness .. ..	..	..	..	..	Occasionally slubby.	..
Remarks .. ..	..	..	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 26 on page 78.

II. REPORT OF THE SPECIAL APPEAL COMMITTEE ON AFRICAN COTTON, A. R. JINJA.

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JINJA.						
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, April/ May 1933 delv.	F. G. M. G. Broach No. 2, July/ August 1933 delv.	F. G. M. G. Broach H. C. No. 2, July/August 1934.	F. G. M. G. Broach Hedge con- tract No. 2, April/May 1936 delivery.	F. G. M. G. Broach Hedge Con- tract No. 2, April/May 1937 delivery.
Class
Colour
Staple Length
Staple Strength
Regularity
Value above or below contract rate
Basis
Date of Valuation
Remarks *

* The difference between 'Pass' and 'Rejection' standards in 1935-36 is Rs. 7/-.

Table 26.—SPINNING TEST RESULTS FOR JINJA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Sample No.	Cotton.	Section.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE.		RELATIVE HUMIDITY. (%)	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	LEA.			BALISTIC.			Evenness Class.	Neeps per yard.	Turns per Inch Actual.	Spinning Room.	Spinning Room.		
															Counts Actual.	Strength (lbs.).	Count Strength Product	Counts Actual.	Work of Sample (Inch-lb.).	Count Work Product							
1133	Jinja	..	1930-31	30-7-31	20	10	5.3	11.2	0.3	16.2	6	100	9700	0.07	17.98	169.7	100.3	2153	20.1	185.6	3721	2	6.2	17.0	84	82	88
1133	Jinja	..	1930-31	31-7-31	30	..	..	..	..	7	100	9700	0.80	21.86	28.8	64.3	1852	29.7	105.0	3118	4	7.0	20.7	85	80	79
1133	Jinja	..	1930-31	31-7-31	40	..	..	..	..	13	138	9050	0.26	25.28	40.4	39.2	1584	40.4	74.8	3022	5	7.0	24.0	84	80	78
1500	Jinja	..	1931-32	12-10-32	20	10	0.9	0.9	0.4	10.4	62	100	9700	0.07	17.98	19.7	112.4	2214	19.9	192.0	3821	3	5.5	17.5	89	85	88
1500	Jinja	..	1931-32	11-10-32	30	..	..	..	..	14	163	9700	0.54	21.86	29.6	67.5	1008	29.1	110.2	3400	4	6.0	21.6	88	83	88
1500	Jinja	..	1931-32	12-10-32	40	..	..	..	..	10	138	9750	8.70	25.28	39.5	43.0	1008	38.1	77.4	2940	5	5.5	24.7	86	82	88
1806	Jinja	..	1932-33	5-0-33	20	10	5.9	9.8	0.4	15.5	88	106	9650	5.80	17.98	19.9	90.3	1797	20.5	175.4	3596	2	1.8	17.3	86	74	78
1806	Jinja	..	1932-33	5-0-33	30	..	..	..	..	3	180	9600	6.38	21.86	29.3	68.1	1995	20.4	114.2	3357	3	2.0	21.1	87	74	77
1806	Jinja	..	1932-33	8-0-33	40	..	..	..	..	2	138	9650	8.67	25.28	38.9	40.7	1583	30.4	70.4	3128	4	1.5	24.3	86	75	80
2402	Jinja	..	1933-34	28-8-34	20	10	5.6	13.0	0.2	18.0	0	202	9800	0.05	17.98	20.3	112.7	2288	20.2	190.0	3059	2	5.0	17.2	86	70	70
2402	Jinja	..	1933-34	28-8-34	30	..	..	..	..	0	166	9000	0.54	21.86	29.7	72.4	2150	29.6	115.4	3416	3	4.5	21.3	86	71	77
2402	Jinja	..	1933-34	29-8-31	40	..	..	..	..	10	144	9000	8.93	25.28	42.2	42.4	1780	41.7	77.6	3236	4	4.5	24.6	86	70	72
2402	Jinja	..	1933-34	30-8-34	50	..	..	..	..	2	131	9000	10.10	28.16	51.3	32.3	1657	50.7	53.2	2997	5	4.7	27.4	86	73	74
2840	Jinja	..	1934-35	18-0-35	30	10	5.0	11.0	0.4	16.3	10	183	9700	7.46	21.86	30.7	67.0	2057	30.5	107.4	3276	3	5.5	20.7	85	60	66
2840	Jinja	..	1934-35	16-0-35	40	..	..	..	..	22	138	9000	7.94	25.28	30.7	47.5	1886	30.5	90.4	3571	4	5.0	24.2	84	80	73
2840	Jinja	..	1934-35	17-0-35	50	..	..	..	..	10	124	9000	10.20	28.16	51.5	31.9	1643	50.5	53.0	2676	5	5.2	26.6	84	80	80
3394	Jinja	..	1935-36	8-10-36	30	10	4.4	10.7	0.4	14.9	7	170	10300	7.35	21.86	31.0	70.6	2189	31.1	109.4	3402	4	4.0	21.2	88	72	70
3394	Jinja	..	1935-36	10-10-36	40	..	..	..	..	2	148	10350	7.58	25.28	39.8	49.4	1906	39.3	86.4	3396	4	3.8	24.4	88	72	86
3394	Jinja	..	1935-36	12-10-36	50	..	..	..	..	5	138	10400	10.00	23.16	50.6	35.3	1786	50.8	86.4	3373	5	4.2	27.3	87	71	86

* Diameter of ring frame front roller: 7/8". Diameter of rings: 1 1/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

1.—FARM WESTERNS COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.
1776	Farm Westerns	Bellary	1932-33
2374	Farm Westerns	Bellary	1933-34
2748	Farm Westerns	Adoni	1934-35
3150	Farm Westerns	Adoni	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	FARM WESTERNS.			
	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white.	Creamy-white.	Creamy-white.	White to creamy-white.
Cleanliness	Leafy.	Very leafy (very fine leaf).	Leafy.	Fairly leafy.
Feel	Softish.	Good smooth.	Good.	Softish.
Ginning and neppiness	A trifle knotted.	Well-ginned.	Somewhat knotted.	A little knotted by ginning.
Seeds	A few seeds.	Too many (2.40%) seeds.	..	..
Card Sliver	Clean.	Leafy.	Clean.	Clean and soft.
Card Web	Even and nep-free.	Good.	Good.	Good.
Weight of 10 flat strips.	17.6 grams.	21.5 grams.	17.8 grams.	13.8 grams.
Remarks .. ..	..	..	..	..

(b) Yarn :—

	FARM WESTERNS.			
	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Leafy.	Clean.	Almost clean.
Evenness	Fairly even.	Fairly uneven.	Even.	Fairly even.
Neppiness	A little neppy.	A little neppy.	Almost free of nep.	Practically free of nep.
Slubbiness .. ..	..	..	..	..

3. Spinning Test Details and Results :—See Table 1 on page 81.

TECHNOLOGICAL REPORTS
ON
COTTONS SUPPLIED BY
THE BOMBAY MILLOWNERS' ASSOCIATION.

These samples are the first arrivals of the new crop of each season. In view of the fact that sometimes a mill using a particular style of cotton in one season does not use the same style in the following season, a certain amount of discontinuity has occurred in some of the varieties. However, so far as possible, efforts have been made to obtain, in each season, samples of the same varieties so that the results of tests in the successive seasons may be comparable. As regards the valuation of these samples, this was kindly done by the Grader (Major Ellis Jones) upto 1931-32, but in the following seasons the mills supplying these samples were requested to furnish their own valuation reports.

Table 1.—SPINNING TEST RESULTS FOR FARM WESTERNS COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	RING FRAME PARTICULARS.						YARN TEST RESULTS.				WASTE PERCENTAGES.						WEIGHT OF SAMPLES, LBS.				COUNTS NOMINAL.				DATE OF SPINNING.				SEASON.				COTTON.				SAMPLE NO.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
										Yarn Breakages per 100 spindles per hour.				Front Roller speed ft. p.m.				Spindle speed ft. p.m.				Draft.				Turns per inch.				LEA.						MILLSTATE.						Relative Humidity (%).				Spinning Room.				Spinning Room.				Relative Humidity (%).																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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* Diameter of ring frame front roller: 1". Diameter of rings: 11".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

2.—BAILHONGAL COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs.)
1042	Bailhongal	1930-31	12
1315	"	1931-32	12
1775	"	1932-33	11
2371	"	1933-34	11
2743	Bailhongal Compta	1934-35	11
3147	Bailhongal	1935-36	11

I. SPINNING TESTS.

1. *Treatment*:—
 - (a) *Blow-robm.*—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
 - (b) *Card-room.*—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.
2. *Spinning Master's Report*:—
 - (a) *Cotton*:—

		Bailhongal.					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	.. ..	Creamy-white.	Dull white.	Dullish creamy-white.	Creamy-white.	White to creamy-white.	White to creamy-white.
Cleanliness	.. ..	Fairly leafy.	Leafy; almost free of stains.	Leafy—very fine leaf.	Very leafy.	Leafy (very fine leaf.)	Leafy.
Feel	.. ..	Good.	Soft.	Good.	Good.	Good.	Good.
Ginning and neppiness.		Well ginned.	Well ginned.	Well ginned.	Slightly knotted.	Well ginned.	Well-ginned.
Seeds	.. ..	1% ginned and partly ginned.	....	....	....	Contains too many unginned seeds.	....
Card Sliver	.. ..	Clean.	A little pin trash present.	A trifle leafy.	Fairly leafy.	Clean.	Clean.
Card Web	.. ..	Very good.	Even and nep-free	Even and nep-free	Good.	Even and nep-free.	Good.
Weight of ten flatstrips		11.2 grams.	16.6 grams; dirty.	16.2 grams.	19.5 grams.	16.6 grams.	12.8 grams.
Remarks	.. ..	Fully pressed.	Fine staple.	Contains much very short fibre.	....	....	....

(b) *Yarn*:—

		Bailhongal.					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	.. ..	Clean.	A trifle leafy.	Clean.	Almost clean.	Almost clean.	Clean.
Evenness	.. ..	Fairly even.	Even.	Fairly even.	Even in the two lower counts.	Fairly even.	Even.
Neppiness	.. ..	A little nopy.	Fairly free of nep	Free of nep.	Free of nep.	Practically free of nep.	Almost nep-free.
Slubbiness	.. ..	....	....	....	Slubby.	....	....
Remarks	.. ..	....	....	....	....	....	....

3. *Spinning Test Details and Results.*—See Table 2 on page 84.

II. GRADER'S REPORT* FOR BAILHONGAL COTTON.

BAILHONGAL.							
		1930-31.	1931-32.	1932-33.*	1933-34*.	1934-35.	1935-36*.
Contract valued under	.. ..	Broach.	Broach/Kumpta.	Hedge Contract No. 5 southern.	Broach.	July/Aug. Broach.	Broach April/May.
Class	.. ..	Fully Good.	Fully Good.	Good M. G.	Fully Good.	Fully good to fine.	Fully good to fine.
Colour	.. ..	Reddish.	Reddish Line.	Brownish.	Brownish.	Brownish white.	Brownish white.
Staple Length	.. ..	7".	31/32".	7".	13/16".	7".	13/16".
Staple Strength	.. ..	Fair.	Good.	Moderate.	Fair.	Fair.	Good.
Regularity	.. ..	Fair.	Fair.	Regular.	Fair.	Somewhat irregular.	Fair.
Value above or below contract rate	.. ..	Rs. 35 on.	Rs. 30 on.	Rs. 25 on.	Rs. 15 on.	Rs. 30 on.	Rs. 30 on.
Basis	.. ..	Rs. 100.	Rs. 170.	F. G. Broach April/May 1933.	Broach July/Aug. Rs. 203.	Rs. 232.	Rs. 203.
Date of Valuation	.. ..	11-5-31.	5-5-32.	15-5-33.	9-7-34.	3-7-35.	20-4-36.
Remarks	.. ..	....	....	Inferior in staple to last year's crop.	....	....	....

* Reports for 1932-33, 1933-34 and 1935-36 were made by the mill supplying the sample.

Table 2.—SPINNING TEST RESULTS FOR BAILHONGAL COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RIVE FRAME PARTICULARS.*						YARN TEST RESULTS.						TEMPERATURE (°F.)	RELATIVE HUMIDITY. (%)	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Yarn Breakages per 100 spindles.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	Lvs.	BALESTIC.			Evenness Class.	Neps per Yarn.	Turns per Inch Actual.	Spinning Room.	Spinning Room.	Testing Room.
																Count Actual	Work of Jumbo (lb.)	Conn. Work Product.						
1042	Bailhongal.	1930-31	4-5-31	20	10	12.2	8.2	0.3	10.7	0	188	9450	6.25	17.98	74.9	1483	19.8	114.4	2265	3	2.2	17.3	89	70
1042	Bailhongal.	1930-31	4-5-31	24	..	..	..	..	..	1	177	9300	3.95	19.73	61.0	1427	23.3	95.6	2227	4	1.5	19.0	91	65
1042	Bailhongal.	1930-31	8-5-31	30	..	..	..	..	..	52	157	9900	7.58	23.11	14.0	1285	20.7	76.8	2281	5	2.0	22.1	91	67
1315	Bailhongal.	1931-32	29-4-32	20	10	13.3	9.2	0.7	21.8	73	194	9650	5.45	17.98	67.4	1361	20.0	101.4	2151	3	1.8	17.5	90	66
1315	Bailhongal.	1931-32	29-4-32	24	..	..	..	..	..	108	173	9450	6.51	19.73	45.8	1127	24.7	87.8	2109	4	2.2	19.0	90	62
1315	Bailhongal.	1931-32	30-4-32	30	..	..	..	..	..	76	151	9900	6.70	23.11	14.3	1280	20.0	80.0	2320	5	2.5	22.2	89	60
1775	Bailhongal.	1932-33	18-5-33	20	10	15.6	10.2	0.6	24.7	119	196	9650	3.21	17.98	64.3	1325	20.6	107.0	2217	4	0.8	17.2	88	70
1775	Bailhongal.	1932-33	19-5-33	24	..	..	..	..	..	91	174	9100	6.02	19.73	31.2	1219	23.4	92.0	2107	4	1.0	18.9	87	68
2371	Bailhongal.	1933-34	9-7-34	20	10	13.8	11.2	0.4	23.8	36	200	9800	6.10	17.98	73.2	1464	20.0	110.8	2216	3	0.8	17.5	86	75
2371	Bailhongal.	1933-34	10-7-34	24	..	..	..	..	..	30	179	9600	5.47	19.73	61.1	1481	23.7	98.0	2337	4	1.0	19.3	87	74
2371	Bailhongal.	1933-34	10-7-34	30	..	..	..	..	..	102	134	9600	6.70	23.11	43.2	1322	20.8	78.8	2348	5	0.8	22.2	80	81
2743	Bailhongal.	1934-35	10-6-35	20	10	12.8	8.7	0.3	20.7	10	104	9300	3.31	17.98	93.8	1870	20.1	135.8	2730	4	0.8	17.4	90	69
2743	Bailhongal.	1934-35	1-6-35	24	..	..	..	..	..	27	163	8750	5.43	19.73	76.7	1810	23.3	117.6	2740	4	1.0	19.0	90	69
2743	Bailhongal.	1934-35	12-6-35	30	..	..	..	..	..	12	152	9650	6.76	23.11	61.8	1707	28.5	98.4	2394	5	0.8	22.6	90	68
3147	Bailhongal.	1935-36	17-4-36	20	10	10.0	7.1	0.4	17.6	47	192	9450	3.95	17.98	66.5	1313	10.5	119.4	2328	3	1.0	17.1	89	70
3147	Bailhongal.	1935-36	20-4-36	24	..	..	..	..	..	14	173	9300	6.41	19.73	50.8	1199	21.8	96.0	2283	4	1.2	18.7	89	68

* Diameter of ring frame front roller—7". Diameter of rim—14".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

3.—BROACH COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals* of the new crop.

Sample No.	Cotton.	Season.
1007	Broach (Salar)	1930-31
1314	„ (Salar)	1931-32
1707	„ (Sadhli)	1932-33
2372	„ (Sadhli)	1933-34
2744	„ (Broach)	1934-35
3148	„ (Jambusar)	1935-36

NOTE—The mill supplying the sample explains that Sadhli is a station in the Broach District and Salar is merely the type name given by a seller to Sadhli or similar cotton.

*The 1935-36 sample does not represent the early arrivals of Broach but represents the average quality of the Broach Cotton.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*—Up to 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Up to 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report.

(a) Cotton :—

	Broach.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white.	Creamy-white.	White, bright.	White to creamy-white; bright.	White to creamy-white; bright.	White; bright.
Cleanliness	Very bright, clean.	Clean, almost free of leaf.	Almost clean.	Fairly clean.	Fairly clean.	Fairly clean.
Feel	Good silky.	Fairly good.	Good bodied.	Good.	Good smooth.	Smooth bodied.
Ginning and Neppiness	Well ginned.	Well ginned.	Well ginned.	Well ginned.	Well ginned.	Well ginned.
Seeds .. ..	..	..	..	..	..	..
Card Sliver	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Card Web	First class.	Even and nep-free.	Even and nep-free.	Good.	Good.	Even and nep-free.
Weight of 10 flat strips.	12.6 grams.	16.2 grams.	15.2 grams.	17.5 grams.	21.6 grams.	17.5 grams.
Remarks	Fully pressed.	Medium fine staple, regular and fairly strong.	..	..	..	..

(b) Yarn :—

	Broach.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.	Clean.	Clean.	A little leafy.
Evenness	Fairly even.	Fairly even.	Fairly even.	Fairly even.	Somewhat uneven.	Fairly even.
Neppiness	Free of nep.	Almost free of nep.	Free of nep.	Free of nep.	A trifle neppy.	Free of nep.
Slubbiness .. ..	..	..	Shows an occasional slub.	..	Slightly slubby.	..
Remarks .. ..	..	..	..	..	..	..

3. Spinning Test Details and Results.—See Table 3 on page 87.

II. GRADER'S REPORT* FOR BROACH COTTON.

		BROACH.				
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
Contract valued under		.. ..	.. ..	.. ..	.. ..	.. ..
Class	.. ..	Broach.	Broach.	Hedge contract Broach F. G. No. 2. April/May 1933.	Broach.	Broach April/May.
Colour	.. ..	Superfine.	Superfine.	Superfine.	Strict fine.	Superfine.
Staple Length	.. ..	White.	White with touch of cream.	White.	Slightly creamy.	Dull white; slightly stained.
Staple Strength	.. ..	13/16"-7/8".	29/32".	3/4".	3/4".	11/16".
Regularity	.. ..	Fair.	Fair.	Moderate.	Fair.	Fair.
Value above or below contract rate	.. ..	Fair.	Fair.	Somewhat irregular.	Fair.	Fair.
Basis	.. ..	Rs. 10 on.	Rs. 20 on.	Rs. 7 on.	Rs. 10 on Broach.	Rs. 6 on.
Date of Valuation	.. ..	Rs. 203.	Rs. 170.	F. G. Broach April/May.	Rs. 203 July/Aug. Broach.	Rs. 203.
Remarks	.. ..	14-3-31.	5-5-32.	17-3-33.	0-7-31.	20-4-36.
	.. ..	....	....	This sample is deficient in staple and strength as compared with last year's crop.	....	....

* Reports for 1932-33, 1933-34 and 1934-35 were made by the mill supplying the sample.

Table 3.—SPINNING TEST RESULTS FOR BROACH COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
Sample No.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										LEADER- STITCH (Ft.).	RELATIVE HUMIDITY (%).		
					Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Yarn Breakages per 100 spindles per hour.	Front Roller speed R. P. M.	Spindle speed R. P. M.	Draft.	Turns per inch.	LEA.			BUILDING.				Turns per inch Actual.	Yarns per yard.				Counts per inch Actual.
														Counts Actual.	Strength (lbs).	Count-Strength Product.	Counts Actual.	Work of Machine (inch-lb.).	Count-Work Product.							
1007	1930-31	17-3-31	16A	10	7.0	8.7	0.0	15.5	7	184	8000	5.75	15.07	16.0	50.0	979	16.0	121.2	2012	3	1.2	15.5	81	67	69	Testing Room.
1007	1930-31	17-3-31	20		..	..	..	..	50	180	10000	6.25	20.23	20.1	83.1	1103	20.5	104.4	2140	4	1.7	19.6	82	66	68	Spinning Room.
1314	1931-32	29-4-32	12	10	5.3	8.0	0.5	14.2	7	208	8000	4.30	13.92	12.0	65.3	1144	12.2	207.2	2223	4	1.5	13.4	83	63	72	
1314	1931-32	28-4-32	16A		..	..	..	..	88	181	8100	5.00	15.97	10.1	57.0	932	10.2	130.6	2116	5	1.8	15.3	90	63	66	
1314	1931-32	29-4-32	10B		..	..	..	..	62	190	9000	5.00	16.07	10.0	60.8	1117	15.3	134.4	2362	4	1.5	16.4	91	67	68	
1707	1932-33	22-3-33	12	10	8.1	9.0	0.5	17.4	30	204	7600	5.25	13.92	12.4	80.3	906	12.4	103.2	2306	4	0.5	13.4	84	70	70	
1707	1932-33	22-3-33	16A		..	..	..	..	121	175	7700	5.54	15.97	16.3	52.1	840	10.0	140.4	2312	5	0.5	15.5	85	71	71	
1707	1932-33	22-3-33	10B		..	..	..	..	133	186	8700	5.53	10.07	16.1	65.0	1061	10.1	148.0	2353	5	0.5	10.4	86	70	70	
2372	1933-34	7-7-34	14	10	6.0	9.7	0.4	16.2	51	200	8200	5.57	14.08	14.1	85.6	1207	14.2	170.0	2332	4	0.5	14.0	87	74	78	
2372	1933-34	9-7-34	16A		..	..	..	..	48	188	8200	5.57	15.07	16.2	67.3	1090	10.4	137.4	2253	4	0.8	15.5	85	78	78	
2372	1933-34	9-7-34	10B		..	..	..	..	36	196	8350	5.57	10.37	16.2	78.6	1273	10.5	136.8	2307	4	0.8	16.3	86	76	78	
2744	1934-35	12-6-35	14	10	7.2	10.8	0.4	17.5	20	188	7600	5.55	14.08	14.2	76.8	1001	13.0	137.0	2608	4	1.8	14.7	90	69	76	
2744	1934-35	13-6-35	10A		..	..	..	..	55	177	7600	5.43	15.07	10.0	70.0	1120	15.7	161.8	2540	5	2.0	15.4	91	67	82	
2744	1934-35	13-6-35	10B		..	..	..	..	12	180	8200	5.54	10.37	15.7	83.0	1303	15.7	165.2	2504	5	1.5	16.4	90	69	82	
3148	1935-36	24-4-36	10	10	6.9	0.8	0.4	16.3	9	198	6950	5.30	12.03	10.5	85.7	900	10.2	238.8	2436	4	0.5	12.1	83	66	70	
3148	1935-36	23-4-36	14A		..	..	..	..	87	180	7450	5.43	14.08	14.2	55.1	782	14.1	181.0	2561	4	0.5	14.2	89	67	70	
3148	1935-36	24-4-36	14B		..	..	..	..	68	200	8900	5.43	15.07	14.0	73.9	1035	14.3	175.2	2505	4	0.8	15.4	89	69	68	

* Diameter of ring frame front roller—1½". Diameter of rings—1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk samples spun under mill conditions it would be less than shown here.

4.—KARUNGANNI COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1063	Karunganni	1930-31
2413	Karunganni	1933-34
2746	Karunganni (Cambodia Dt.)	1934-35
3271	Karunganni	1935-36

1. Treatment :—

(a) *Blow-room*—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KARUNGANNI.			
	1930-31.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white; fairly bright.	White to creamy-white; bright.	White; bright.	White to creamy-white; brightish.
Cleanliness	Fairly clean.	Fairly clean.	Fairly clean.	A little leafy.
Feel	Full-bodied.	Good smooth.	Good silky.	Good smooth.
Ginning and neppiness ..	A fair amount of knot and nep.	Well-ginned.	Well-ginned.	A little knotted.
Seeds	Some out seed.	..	Few crushed seeds.	..
Card sliver	Almost clean.	Fairly clean.	Clean; soft.	Almost clean.
Card web	Somewhat neppy and cloudy.	..	A little neppy.	A trifle neppy.
Weight of 10 flat strips ..	16.4 grams.	23.0 grams.	26.0 grams.	18.0 grams.
Remarks	Fully-pressed.	..	..	..

(b) Yarn :—

	KARUNGANNI.			
	1930-31.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean.	Almost clean.	Clean.	Little leafy.
Evenness	Fairly even.	Fairly even.	Even.	Fairly even.
Neppiness	Somewhat neppy.	A little neppy.	Neppy.	Somewhat neppy.
Slubbiness .. .. .	..	A little slubby.	..	Occasionally slubby.
Remarks .. .. .	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 4 on page 90.

II. GRADER'S REPORT* FOR KARUNGANNI COTTON.

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	1930-31.	1933-34.	1934-35.	1935-36.
Contract valued under	Broach.	Broach.	July/August Broach.	Broach July/August.
Class	Fine.	Fine.	Superfine.	Fine.
Colour	White.	White.	Bright white.	White.
Staple Length	5/8-1 inch.	15/16 inch.	7/8 inch.	13/16 inch.
Staple Strength	Irregular.	Good.	Fair.	Fair.
Regularity	Very irregular.	Good.	Slightly irregular.	Slightly irregular.
Value above or below contract rate	Rs. 50 on.	Rs. 55 on Broach.	Rs. 53 on.	Rs. 30 on.
Basis	Rs. 175.	Rs. 203 July-Aug. Broach.	Rs. 232.	Rs. 220.
Date of Valuation	30-5-31.	9-7-34.	3-7-35.	1-7-36.
Remarks	Valued on name only.	..	Somewhat soft.	..

* Grader's Report for 1933-34 and 1935-36 is compiled by the mill supplying the sample.

Table 4.—SPINNING TEST RESULTS FOR KARUNGANNI COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample lbs.	WASTE PERCENTAGES.			RING FRAME PARTICULARS.*				YARN TEST RESULTS.							TEMPERATURE (°F.).		RELATIVE HUMIDITY (%).				
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	LEA.		BALLISTIC.			Evenness Class.	Neps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.	Testing Room.	
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Machine (inch-lb.)							Count-Work Product.
1063	Karunganni.	1930-31	28-6-31	20	10	7.2	9.2	0.8	16.2	35	187	9400	0.38	17.98	19.8	60.1	1190	19.9	110.8	2205	4	5.2	17.2	90	68	69
1063	Karunganni.	1930-31	29-6-31	24		..	..	..	..	44	174	9375	0.38	19.73	23.1	59.8	1173	23.7	94.8	2247	5	5.5	19.0	90	68	71
2413	Karunganni.	1933-34	1-8-34	20	10	6.9	11.7	0.4	18.1	42	186	9000	0.19	17.98	20.1	67.2	1351	20.2	110.6	2355	4	2.2	16.7	83	81	86
2413	Karunganni.	1933-34	1-8-34	24		..	..	..	..	77	168	8950	0.41	10.73	23.7	32.4	1242	23.5	100.2	2355	4	2.5	18.6	82	82	88
2746	Karunganni.	1934-35	17-6-35	20	10	7.8	13.0	0.3	20.6	16	194	9300	0.07	17.98	20.0	86.0	1720	19.9	139.8	2782	4	4.8	17.5	80	60	82
2746	Karunganni.	1934-35	17-6-35	24		..	..	..	..	23	176	9300	0.07	19.73	22.9	73.6	1635	23.0	110.4	2746	4	5.5	19.4	90	67	80
3271	Karunganni.	1935-36	13-7-36	20	10	8.8	9.6	0.3	17.7	0	193	9700	5.98	17.98	20.2	74.4	1503	19.7	127.4	2510	4	4.0	17.4	87	70	72
3271	Karunganni.	1935-36	16-7-36	24		..	..	..	..	18	174	9700	5.76	19.73	24.1	57.6	1388	24.1	104.0	2606	4	3.8	19.1	88	73	74
3271	Karunganni.	1935-36	16-7-36	30		..	..	..	..	26	155	9500	6.97	21.86	29.7	42.0	1247	29.9	85.0	2542	5	3.2	21.1	88	73	72

* Diameter of ring frame front roller—1". Diameter of ring—11".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

5.—NANDYAL COTTON.

These samples have been tested by arrangement with the Mill-owners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs).
1069	Nandyal	1930-31	11
2751	„ (Northern Cambodia).	1934-35	10

I. SPINNING TESTS.

1. *Treatment*.—The 1930-31 sample was passed through the Porcupine, Crighton (twice), Hopper, Scutcher (3 times), Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving in Ring Frame No. 1. The 1934-35 sample was passed through the Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times) in the blow-room and was spun on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement; otherwise its treatment was the same as for the cotton of the other season.

2. *Spinning Master's Report* :—

(a) *Cotton* :—

	NANDYAL	
	1930-31.	1934-35.
Colour	Creamy-white.	White to creamy-white.
Cleanliness	Leafy (very fine leaf).	Slightly stained ; Leafy.
Feel	Good ; soft.	Good.
Ginning and Neppiness	Well-ginned ; a little neppy.	Well-ginned.
Seeds .. .. .	....	....
Card Sliver	Clean.	Clean ; soft.
Card Web	Trifle neppy.	Slightly neppy.
Weight of ten flat strips	15.8 grams.	25.8 grams.
Remarks	Staple regular in length and of good strength.	....

(a) *Yarn* :—

	NANDYAL	
	1930-31.	1934-35.
Cleanliness	Clean.	Clean.
Evenness	Fairly even.	Fairly even.
Neppiness	A little too neppy.	A little neppy (fine neps).
Slubbiness .. .. .	....	A trifle slubby.

3. *Spinning Test Details and Results* :—See Table 5 on page 92.

II.—GRADER'S REPORT* FOR NANDYAL COTTON.

NANDYAL														
1930-31.										1931-32.				
Contract valued under	..	..	..	..	..	..	..	..	..	Bronch.	Bronch July/Aug.	..	..	..
Class ..	..	..	..	..	..	..	..	..	..	Barely fine.	Fine.	..	..	..
Colour ..	..	..	..	..	..	..	..	..	..	White.	Creamy.	..	..	..
Staple Length ..	..	..	..	..	..	..	..	..	..	15/16 inch.	7/8 inch.	..	..	..
Staple Strength ..	..	..	..	..	..	..	..	..	..	Good.	Good.	..	..	..
Regularity ..	..	..	..	..	..	..	..	..	..	Fair.	Fairly regular.	..	..	..
Value above or below contract rate	..	..	..	..	..	..	..	..	..	Rs. 45 on.	Rs. 60/-on.	..	..	..
Basis ..	..	..	..	..	..	..	..	..	..	Rs. 100.	Bronch July/Aug.	..	..	..
Date of Valuation	..	..	..	..	..	..	..	..	..	10-6-31.	25-6-31.	..	..	..
Remarks ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

* Report for 1931-32 is supplied by the mill supplying the sample.

Table 5.—SPINNING TEST RESULTS FOR NANDYAL COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season	Date of Spinning.	WASTE PERCENTAGES.			RING FRAME PARTICULARS.*						YARN TEST RESULTS.						TEMPERATURE ° F.		RELATIVE HUMIDITY. %					
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breaks per 100 spindles per hour.	Front Roller Spindle 21. P. 21.	Spindle Spindle 21. P. 21.	Draft.	Turns per Inch.	LEA.			BALISTIC.			Turns per Inch Actual.	Splining Bloom.	Splining Bloom.	Testing Bloom.				
													Count-Strength Product.	Count's Actual.	Work of Spindle (inch-lbs.)	Count-Work Product.	Evenness (C.V.S.)	Neps per Yarn.								
1069	Nandyal	1930-31	4-6-31	24	10	10.5	0.2	0.6	9.1	18	180	9350	7.14	19.73	24.1	65.7	1583	24.5	110.8	2715	4	5.5	10.0	92	67	69
1069	Nandyal	1930-31	4-6-31	20	..	..	..	..	..	72	150	9500	7.29	21.86	31.0	42.3	1311	31.0	53.4	2600	5	5.0	21.1	92	71	68
1069	Nandyal	1930-31	4-6-31	34	..	..	..	..	..	40	142	9000	7.81	23.26	32.9	42.7	1405	33.8	80.0	2704	5½	5.7	22.5	92	68	67
2751	Nandyal	1931-35	24-6-35	20	10	8.9	12.9	0.5	21.9	5	180	8800	5.98	17.98	19.9	70.3	1399	20.0	118.0	2372	4	2.5	10.9	84	80	74
2751	Nandyal	1931-35	22-6-35	24A	..	..	..	..	..	27	156	8650	6.13	19.73	23.7	52.1	1235	23.8	100.0	2304	4	2.2	18.9	68	73	74
2751	Nandyal	1931-35	22-6-35	24B	..	..	..	..	..	50	186	10300	6.25	20.74	23.8	59.5	1392	23.8	101.8	2423	5	2.5	19.5	88	73	72

* Diameter of ring frame front rollers—7/8". Diameter of rings—1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions, it would be less than shown here.

6.—NORTHERN CAMBODIA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1064	Northern Cambodia (Kurnool)	1930-31
2747	Northern Cambodia (Kurnool)	1934-35
3272	Northern Cambodia	1935-36

I.—SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room*—1930-31 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
 1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room*—1930-31 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
 1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band-drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	NORTHERN CAMBODIA.		
	1930-31.	1934-35.	1935-36.
Colour	Creamy-white to creamy.	Creamy-white.	White to creamy-white.
Cleanliness	Shows an occasional stain ; fairly clean.	Occasionally stained.	Fairly clean.
Feel	Full bodied.	Somewhat softish.	Smooth and softish.
Ginning and neppiness ..	Somewhat knotted and nepped.	Fairly well-ginned.	Fairly well-ginned.
Seeds	1% ginned and unginned seeds.	..	..
Card sliver	Clean.	Clean.	Clean and soft.
Card web	Fairly good.	Good.	A little neppy.
Weight of 10 flat strips ..	15.7 grams.	20.4 grams.	21.6 grams.
Remarks .. ..	..	..	..

(b) Yarn :—

	NORTHERN CAMBODIA.		
	1930-31.	1934-35.	1935-36.
Cleanliness	Fairly clean.	Almost clean.	Almost clean.
Evenness	Fairly even.	Fairly even.	Fairly even.
Neppiness	Somewhat neppy.	Fairly neppy.	Neppy.
Slubbiness .. ..	..	Somewhat slubby.	A little slubby.

3. Spinning Test Details and Results :—See Table 6 on page 95.

II.—GRADER'S REPORT* FOR NORTHERN CAMBODIA.

NORTHERN CAMBODIA.									
				1930-31.	1934-35.	1935-36.			
Contract valued under	Broach.	July/Aug. Broach.	Broach July/Aug.		
ClassFine.	Fine.	E. G. to Fine.		
ColourSlight-cream.	Brownish white; somewhat stained.	Creamy-white.		
Staple Length7/8 inch.	Full 7/8 inch.	31/32 inch.		
Staple StrengthFair.	Very good.	Fair.		
RegularityPoor.	Regular.	Fairly regular.		
Value above or below contract rateRs. 35 on.	Rs. 65 on.	Rs. 35 on.		
BasisRs. 175.	Rs. 232.	Rs. 220.		
Date of Valuation30-5-31.	3-7-35.	1-7-36.		
Remarks		

* Report for 1935-36 is made up by the mill supplying the sample.

Table 6--SPINNING TEST RESULTS FOR NORTHERN CAMBODIA.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*							YARN TEST RESULTS.										TEMPERATURE. (°F.)	RELATIVE HUMIDITY. (%)
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle speed R.P.M.	Draft.	Turns per Inch.	LEA.			BALLASTO.		Evenness Class	Keps per yard.	Turns per Inch. Actual.	Spinning Room.	Testing Room.				
															Counts Actual.	Strength lb.	Count Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).						Count Work Product.			
1004	Northern Cambodia ..	1930-31	29-5-31	20	10	8.3	8.7	0.4	10.0	25	187	0,400	0.25	17.08	20.1	65.0	1325	20.1	112.4	2293	4	0.2	17.4	90	03	70		
1004	Northern Cambodia ..	1930-31	29-5-31	24		..	..	..	..	20	174	0,375	0.25	19.73	23.1	57.0	1317	24.2	98.0	2372	5	4.0	18.0	90	03	70
2747	Northern Cambodia ..	1934-35	18-0-35	20	10	7.3	10.0	0.4	17.5	10	195	0,550	0.07	17.08	19.9	83.2	1050	10.8	130.2	2760	4	3.2	17.3	87	75	73		
2747	Northern Cambodia ..	1934-35	19-0-35	24		..	..	..	..	18	181	0,800	5.55	10.73	23.7	65.0	1555	23.0	115.8	2793	4	4.2	10.1	89	70	70
2747	Northern Cambodia ..	1934-35	18-0-35	30		..	..	..	..	17	100	0,000	0.04	21.80	29.1	40.0	1450	29.5	80.0	2555	5	3.2	21.2	88	71	70
3272	Northern Cambodia ..	1935-36	13-7-36	20	10	7.3	11.5	0.3	18.7	10	103	0,700	0.10	17.08	20.3	82.3	1071	20.2	124.0	2517	4	4.0	17.1	80	73	72		
3272	Northern Cambodia ..	1935-36	17-7-36	24		..	..	..	..	0	178	0,700	5.70	10.73	23.6	65.7	1551	23.8	103.1	2401	4	5.5	18.0	88	73	72
3272	Northern Cambodia ..	1935-36	17-7-36	30		..	..	..	..	13	150	0,700	7.11	21.80	30.3	17.2	1430	30.0	82.0	2552	5	6.0	20.0	88	77	73

* Diameter of ring frame front roller: 7/8". Diameter of rings: 1 5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

7.—BENGALS COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample				Sample			
No.	Cotton.	Place.	Season.	No.	Cotton.	Place.	Season.
912	Bengals.	Kasgunj ..	1930-31	2667	Bengals.	Hansi ..	1934-35
1602	„	Kosi ..	1932-33	3030	„	Hansi ..	1935-36
2106	„	Kosi.. ..	1933-34				

I.—SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room.*—Upto 1934-35 inclusive ; Porcupine, Crighton (twice), Hopper feeder, Scutcher (3 times) ; 1930-31 Cotton was passed only once through the Crighton. 1935-36 ; Hopper Bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room.*—Upto 1933-34 inclusive ; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36 ; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :

	BENGALS.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white.	Creamy-white.	Creamy-white to creamy.	Creamy-white.	White to creamy-white.
Cleanliness	Fair ; stained ..	Leafy ; stained ..	Badly stained and leafy.	Badly stained ; leafy.	Leafy ; a little stained.
Feel	Dull ; rough ..	Roughish ..	Fairly good ..	Softish.	Rough.
Ginning and neppiness ..	Well-ginned (roller).	Somewhat knotted.	..	Fairly well-ginned.	Well-ginned.
Seeds .. ..	..	2.2% unginned	Contains a few seeds.	..	..
Card sliver .. ..	..	Almost clean ..	Clean ..	Fairly clean ..	Almost clean.
Card web .. ..	..	Good ..	Good ..	Fairly good after easing the tension.	Good.
Weight of 10 flat strips ..	..	22.5 grams ..	19.0 grams ..	20.3 grams ..	21.0 grams.
Remarks	Fully pressed ; a lot of fly in the Blow-room ..	Well-watered ; breakage excessive in 15A.	..	A poor sample ..	..

(b) Yarn :

	BENGALS.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean ..	Clean ..	Little leafy ..	Fairly clean.	Clean.
Evenness	Very uneven ..	Fairly even ..	Fairly even in the lower count only.	Fairly uneven.	Uneven.
Neppiness	Free of nep ..	Almost nep-free ..	Free of nep ..	Free of nep.	Nep-free.
Slubbiness	Slubby ..	..	..	Slubby.	Somewhat slubby.

3. Spinning Test Details and Results :—See Table 7 on page 98.

II. GRADER'S REPORT* FOR BENGALS COTTON.

	BENGALS.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	Bengals.	Bengals.	Bengals.	Bengals.	Bengals.
Class	Fine	Fully good.	Fully good.	Fully good.	Fully good M. G.
Colour	White.	White.	Dull.	White.	Fairly white.
Staple Length	5/8 inch.	11/16 inch.	3/8 inch.	3/8 inch.	1/2 inch.
Staple Strength	Good.	Fair.	Rather poor.	Fair.	Good.
Regularity	Good.	Fair.	Good.	Fair.	Good.
Value above or below contract rate	Rs. 14 on.	Rs. 10 on.	Rs. 7 off.	Rs. 2 on.	Rs. 10 on.
Basis	Rs. 130	Rs. 168.	Rs. 143.	Rs. 151.	Rs. 148.
Date of Valuation	29-11-30	..	22-1-34.	8-2-35.	4-1-36.
Remarks .. ..	..	..	..	..	..

* Report since 1933-34 is made up by the mill supplying the sample.

Table 7.—SPINNING TEST RESULTS FOR BENGALS COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton	Season	Date of spinning	Counts Nominal	Weight of sample. (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.				YANK TEST RESULTS.						TEMPERATURE. (°F.)		RELATIVE HUMIDITY. (%)				
						Blow Loom Loss.	Card Loom Loss.	Spinning Loss.	Total Loss. †	Yarn breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	LEA.			BALANCING.			Twines class.		Neys per yard.	Turns per inch Actual	Spinning Room.	Weaving Room.
															Counts Actual	Strength lbs.	Count-Strength Product.	Counts Actual	Work of Spindle (inches-lb.)	Count-Work Product.						
912	Bengals	1930-31	24-11-30	6A	10	6.4	10.3	0.7	10.7	160	170	..	4.00	9.67	6.0	46.2	277	6.0	239.6	1538	6	1.7	9.4	67	64	
912	Bengals	1930-31	25-11-30	8A		..	..	..	..	347	164	..	5.21	11.33	8.2	18.7	133	8.1	143.6	1163	7	1.5	10.7	67	69
1602	Bengals	1932-33	5-1-33	6A	10	13.8	15.2	0.6	27.3	123	175	4700	4.78	9.67	6.4	47.0	301	6.3	232.4	1590	4	1.0	9.4	70	74	
1602	Bengals	1932-33	5-1-33	60		..	..	..	..	205	183	5600	4.73	11.03	6.0	103.0	654	6.3	230.6	1897	4	1.2	10.0	70	72
2106	Bengals	1933-34	29-1-34	6A	10	12.5	14.3	0.2	23.2	0	180	4800	4.50	9.57	5.9	64.8	550	5.9	346.0	2041	4	0.8	9.5	67	74	
2106	Bengals	1933-34	29-1-34	60		..	..	..	..	0	180	5600	4.50	11.03	5.9	147.4	870	6.0	365.2	2101	5	1.0	10.7	63	63
2106	Bengals	1933-34	29-1-34	8B		..	..	..	..	87	185	6100	6.25	12.63	8.3	73.2	604	8.4	292.4	1701	6	0.8	12.3	69	74
2667	Bengals	1934-35	20-2-35	6B	10	14.1	14.8	0.6	27.3	101	183	5300	5.00	10.44	6.2	42.7	265	6.3	265.0	1295	4	1.0	10.2	63	70	
2667	Bengals	1934-35	20-2-35	60		..	..	..	..	136	193	5900	5.00	11.03	6.4	56.2	360	6.2	246.4	1323	4	1.2	10.8	67	63
2667	Bengals	1934-35	20-2-35	8D		..	..	..	..	234	132	5350	5.00	12.63	8.2	33.1	293	8.2	176.0	1443	5	1.2	12.3	68	72
3000	Bengals	1935-36	12-1-36	6D	10	13.5	15.0	0.3	26.7	136	176	5300	5.10	10.44	6.4	33.1	244	6.2	203.0	1290	5	0.2	10.1	66	66	
3000	Bengals	1935-36	12-1-36	60		..	..	..	..	122	192	6000	5.10	11.03	6.2	60.8	377	6.1	260.2	1642	5	0.2	10.6	67	64
3000	Bengals	1935-36	12-1-36	8D		..	..	..	..	240	152	5300	5.00	12.63	8.1	34.8	292	8.4	160.4	1347	5	0.5	12.1	66	66

* Diameter of ring frame roller: 7/8". Diameter of spindles: 1 1/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

8.—KHANDESH COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
965	Khandesh	Yawal	.. 1930-31	1250	Khandesh	Nimbora	.. 1931-32
1247	"	"	.. 1931-32	1603	"	Saudha	.. 1932-33
967	"	Ranala	.. 1930-31	2105	"	"	.. 1933-34
1249	"	"	.. 1931-32	2663	"	"	.. 1934-35
968	"	Nimbora	.. 1930-31	3031	"	"	.. 1935-36

I. SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room*.—Upto 1934-35 inclusive; Porcupine, Crighton (twice), Hopper feeder, Scutcher (3 times). 1935-36; Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room*.—Upto 1933-34 inclusive; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KHANDESH.									
	1930-31. (Yawal).	1931-32. (Yawal)	1930-31. (Ranala).	1931-32. (Ranala).	1930-31. (Nimbora).	1931-32. (Nimbora).	1932-33. (Saudha).	1933-34. (Saudha).	1934-35. (Saudha).	1935-36. (Saudha).
Colour ..	White to creamy-white.	Creamy-white.	White to creamy-white; slightly bright.	Creamy-white.	White to creamy-white.	White to creamy-white.	Brightish creamy-white.	White to creamy-white; bright.	Dullish creamy-white.	White to creamy-white.
Cleanliness ..	Slightly stained; leafy.	Slightly stained; leafy.	Occasional stain.	Occasional stain; leafy.	Leafy ..	Somewhat stained; leafy.	Somewhat leafy.	Somewhat leafy.	Very slightly stained; leafy.	Leafy; a trifle stained.
Feel ..	Somewhat roughish.	Fairly good feel.	..	Slightly rough in feel.	Good ..	Softish ..	Good ..	Smooth and bodied.	Good ..	Roughish.
Ginning and neppiness.	Well-ginned.	Well-ginned.	Fairly well-ginned.	Well-ginned.	Fairly knotted.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds ..	1% unginned seeds.	1.4% unginned seeds.	2.1% ginned and unginned.	1.8% unginned.	1.4% ginned.	1.4% ginned and unginned.	2.75% ginned and unginned.	A few seeds.	1.3% seeds ..	..
Card silver ..	Clean.	Clean ..	Clean ..	Clean ..	..	Clean ..	Clean ..	Clean ..	Clean ..	Clean.
Card web ..	Nep-free ..	Nep-free and even.	Good.	Free of nep.	..	Practically nep-free.	Good ..	Even and nep-free.	Good ..	Good.
Weight of flatstrips.	15.2 grams.	16.5 grams ..	15.3 grams ..	18.3 grams ..	..	18.5 grams ..	16.8 grams ..	15.4 grams ..	19.5 grams ..	16.6 grams.
Remarks ..	Fully pressed; staple weak for its length.	..	Fullypressed	..	Fully pressed	..	..	..	..	..

(b) Yarn :—

	KHANDESH.									
	1930-31. (Yawal).	1931-32. (Yawal)	1930-31. (Ranala).	1931-32. (Ranala).	1930-31. (Nimbora).	1931-32. (Nimbora).	1932-33. (Saudha).	1933-34. (Saudha).	1934-35. (Saudha).	1935-36. (Saudha).
Cleanliness ..	Clean ..	Clean ..	Clean ..	Almost clean	Clean ..	Clean ..	Clean ..	Clean ..	Clean ..	Clean.
Evenness ..	Even ..	Even ..	Even in the lower counts only.	Even to fairly even.	Even in lower count.	Fairly even..	Fairly even..	Even ..	Fairly even..	Fairly even.
Neppiness ..	Free of nep.	Free of nep.	Free of nep.	Practically free of nep.	Nep-free ..	Almost free of nep.	Almost free of nep.	Free of nep.	Free of nep.	Nep-free.
Slubbiness ..	..	..	..	..	..	Occasional slub.	..	..	A little slubby	A little slubby

3. Spinning Test Details and Results :—See Table 8 on page 101.

II.—GRADER'S REPORT* FOR KHANDESH COTTON.

KHANDESH.										
	1930-31. (Yawal.)	1931-32. (Yawal.)	1930-31. (Ranala.)	1931-32. (Ranala.)	1930-31. (Nimbora.)	1931-32. (Nimbora.)	1932-33. (Sandha.)	1933-34. (Sandha.)	1934-35. (Sandha.)	1935-36. (Sandha.)
Contract valued under	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.
Class	Fully good.	Fine.	Fully good.	Fine.	Fully good.	Fine.	Fully good to fine.	Fine.	Fine.	Fully good M.G.
Colour	White.	White.	White.	White.	White.	White.	White.	White.	White.	Fairly white.
Staple Length	5/8 inch.	3/4 inch.	13/16 inch.	13/16 inch.	13/16 inch.	27/32 inch.	3/4 inch.	3/4 inch.	1 1/2 inch.	11/16 inch.
Staple Strength	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Very good.	Good.	Good.
Regularity	Fair.	Good.	Fair.	Good.	Fair.	Good.	Fair.	Good.	Good.	Fairly good.
Value above or below contract rate ..	Rs. 5 off.	Rs. 15 on.	Rs. 5 on.	Rs. 17 on.	Rs. 5 on.	Rs. 18 on.	Rs. 8 on.	Rs. 1 on.	Rs. 2 on.	Rs. 5 on.
Basis	Rs. 165.	Rs. 212.	Rs. 165.	Rs. 212.	Rs. 165.	Rs. 212.	Rs. 188.	Rs. 179.	Rs. 226.	Rs. 201.
Date of Valuation	5-2-31.	10-2-32.	5-2-31.	10-2-32.	5-2-31.	10-2-32.	9-1-33.	22-1-34.	8-2-35.	4-1-36.
Remarks .. ..	..	..	..	..	..	..	..	..	..	..

* Report since 1933-34 is made up by the mill supplying the sample.

Table 8.—SPINNING TEST RESULTS FOR KHANDESH COTTON.

Sample No.	Cotton.	Season.	Date of Spinning	Counts Nominal.	Weight of Sample (lb.)	WASTE PERCENTAGES.				RINGS FRAME PARTICULARS.*				YARN TEST RESULTS.						LAPPER ATTOR. (°F.).	RELATIVE HUMIDITY (%)					
						Move Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Draft.	Turns per inch.	L.Y.			BALLISTIC.								
															Counts Actual.	Strength (lbs.)	Count Strength	Count Actual.	Work of Hanks (lb. lb.)			Count-Work Product.	Steps per yard.	Turns per inch		
905	Khandesh .. (Yaval).	1930-31	2-2-31	8	10	9.4	9.2	0.2	17.0	0	200	..	4.27	11.31	7.0	113.9	900	8.0	281.0	2223	3	1.2	11.0	80	71	69
905	Khandesh .. (Yaval).	1930-31	31-1-31	10A	..	..	..	..	..	10	184	..	5.42	12.63	10.0	72.0	720	10.2	201.8	2039	4	1.7	12.3	81	69	72
905	Khandesh .. (Yaval).	1930-31	2-2-31	10B	..	..	..	..	..	40	100	..	5.32	13.54	10.2	49.4	912	10.1	202.6	2310	5	2.0	13.2	80	70	67
1247	Khandesh .. (Yaval).	1931-32	2-2-32	8	10	10.5	11.3	0.4	20.9	44	504	6250	4.78	11.71	8.1	105.8	981	8.2	283.2	2324	3	1.0	10.9	80	70	68
1247	Khandesh .. (Yaval).	1931-32	1-2-32	10A	..	..	..	..	..	55	180	6300	5.21	12.63	10.0	77.1	771	10.0	221.2	2212	4	1.0	12.1	82	75	71
1247	Khandesh .. (Yaval).	1931-32	1-2-32	10B	..	..	..	..	..	45	188	6250	5.12	11.54	10.1	64.1	969	10.4	220.8	2206	4	1.0	13.0	82	76	66
907	Khandesh .. (Ranade).	1930-31	2-2-31	10	10	12.7	0.3	0.0	21.2	30	196	..	5.63	12.03	10.1	86.0	904	10.1	231.2	2376	4	1.2	12.2	80	73	67
907	Khandesh .. (Ranade).	1930-31	2-2-31	12	..	..	..	..	..	24	188	..	5.74	13.92	11.0	78.6	935	12.0	106.2	2314	5	1.5	13.4	83	67	63
907	Khandesh .. (Ranade).	1930-31	3-2-31	14	..	..	..	..	..	80	175	..	0.75	11.03	17.9	56.5	789	17.8	140.8	2020	6	1.5	14.8	82	68	67
1249	Khandesh .. (Ranade).	1931-32	2-2-32	12	10	11.3	10.8	0.5	21.3	20	168	7200	0.58	13.92	11.0	87.1	1036	12.1	185.6	2216	3	1.8	13.6	82	66	67
1249	Khandesh .. (Ranade).	1931-32	2-2-32	14A	..	..	..	..	..	18	175	7200	0.50	15.03	13.0	71.0	974	13.0	147.2	2016	4	2.0	14.7	83	68	65
1249	Khandesh .. (Ranade).	1931-32	2-2-32	14B	..	..	..	..	..	53	185	7800	0.51	15.97	13.9	78.0	1092	14.0	120.8	2238	4	1.8	15.4	82	60	66
908	Khandesh ..	1930-31	2-2-31	10	10	12.3	10.2	0.7	21.8	10	196	..	5.51	12.03	10.1	91.2	043	10.3	230.4	2167	4	1.2	12.1	80	73	66
908	Khandesh ..	1930-31	2-2-31	12A	..	..	..	..	..	48	188	..	5.71	13.92	11.6	89.1	1031	11.0	202.4	2109	5	1.7	13.4	83	67	69
908	Khandesh ..	1930-31	3-2-31	14A	..	..	..	..	..	93	175	..	0.77	11.08	14.1	57.1	805	14.2	176.8	1912	6	2.0	14.5	82	69	65
1250	Khandesh ..	1931-32	3-2-32	12A	10	10.2	10.3	0.6	19.8	65	187	7250	0.35	14.92	12.2	60.2	978	12.0	184.0	2110	4	0.8	13.5	82	60	71
1250	Khandesh ..	1931-32	4-2-32	14A	..	..	..	..	..	60	175	7300	0.35	15.03	17.8	66.0	911	13.8	174.4	2107	4	1.2	14.6	81	66	71
1250	Khandesh ..	1931-32	4-2-32	14B	..	..	..	..	..	70	183	7800	0.33	15.97	12.6	81.0	1114	13.8	168.0	2218	4	1.2	15.4	81	66	63
1003	Khandesh ..	1932-33	5-1-33	12A	10	12.3	10.5	0.6	21.6	134	180	7100	0.41	13.91	12.2	71.1	867	12.1	174.8	2230	4	1.2	13.6	80	70	74
1003	Khandesh ..	1932-33	5-1-33	14A	..	..	..	..	..	131	160	6250	0.10	14.98	13.6	61.0	850	14.8	187.2	2327	4	1.2	14.3	81	66	74
1003	Khandesh ..	1932-33	5-1-33	14B	..	..	..	..	..	51	180	7620	0.22	15.97	13.8	70.2	909	13.8	173.2	2300	4	1.2	15.0	80	68	72
2105	Khandesh ..	1932-34	27-1-34	12A	10	10.0	10.8	0.3	20.0	53	198	7500	0.25	13.91	12.0	78.3	913	12.0	194.8	2117	4	0.6	13.4	81	68	72
2105	Khandesh ..	1932-34	27-1-34	14A	..	..	..	..	..	87	108	7000	0.13	11.98	13.0	63.8	887	11.2	193.2	2117	4	0.5	14.5	81	67	72
2105	Khandesh ..	1932-34	27-1-34	14B	..	..	..	..	..	58	170	7750	0.17	15.97	14.0	75.9	1003	13.0	170.8	2371	4	0.8	15.4	81	67	70
2663	Khandesh ..	1934-35	16-2-35	10	10	10.3	10.9	0.1	20.4	27	199	6800	0.22	12.01	10.2	79.3	809	10.2	159.2	2107	4	1.0	12.0	80	68	68
2663	Khandesh ..	1934-35	16-2-35	12A	..	..	..	..	..	36	160	6250	0.21	13.92	11.0	61.7	734	12.2	185.2	2259	5	0.8	13.2	79	67	63
2663	Khandesh ..	1934-35	16-2-35	12B	..	..	..	..	..	44	183	7200	0.21	14.63	12.1	71.3	809	12.2	187.6	2280	5	1.0	14.2	79	68	63
3031	Khandesh ..	1935-36	14-1-36	10	10	10.2	12.3	0.3	21.4	36	197	6800	0.40	11.64	10.4	72.4	763	10.2	194.0	2081	4	0.8	12.0	79	68	62
3031	Khandesh ..	1935-36	14-1-36	12A	..	..	..	..	..	29	170	6200	0.55	13.92	12.0	56.5	678	11.9	178.4	2123	4	0.5	13.5	79	67	65
3031	Khandesh ..	1935-36	14-1-36	12B	..	..	..	..	..	29	182	7300	0.68	14.63	12.3	61.0	786	12.3	183.2	2253	4	0.5	14.2	80	68	63

* Diameter of ring frame front roller: 7/8". Diameter of rings: 1 5/8".

† It is to be noted that the total loss is for a small sample spun under mill conditions it would be less than shown here.

9 (a).—UJJAIN (Ujjain) COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
969	Ujjain	Ujjain	.. 1930-31	2107	Ujjain	Ujjain	.. 1933-34
1251	"	"	.. 1931-32	2664	"	"	.. 1934-35
1670	"	"	.. 1932-33	3028	"	"	.. 1935-36

I.—SPINNING TESTS.

1. Treatment:—

(a) *Blow-room*—Upto 1934-35 (inclusive); Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1935-36; Hopper bale opener, Horizontal cleaner, Crighton (once), gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*—Upto 1933-34 (inclusive); Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report:—

(a) Cotton:—

		UJJAIN (UJJAIN).					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	..	Creamy-white.	Creamy white; slightly bright.	White ..	White to creamy white; brightish.	Creamy-white.	White.
Cleanliness	..	Fairly leafy	Occasional stain; fairly leafy.	Leafy ..	Occasional stain; somewhat leafy.	Occasionally stained; leafy	Leafy; a little stained.
Feel	..	Good ..	Good ..	Soft and fairly good.	Good smooth ..	Smooth ..	Good.
Ginning and neppiness.	..	A good deal knotted.	Fairly well-ginned.	Somewhat knotted and nopped.	Well-ginned ..	Well-ginned ..	Well-ginned.
Seeds	..	1.0% unginned.	2% ..	..	Contains a few unginned seeds.	Contains 1.3% seeds.	Contains 78 % full clean seeds.
Card sliver	..	..	Almost clean ..	Almost clean ..	Clean ..	Clean ..	Fairly clean.
Card web	..	..	Nep-free; a trifle cloudy.	Good ..	Even and nep-free.	Good ..	Web good.
Weight of 10 flat strips.	..	..	10.8 grams	17.7 grams	18.5 grams	20.0 grams	17.1 grams.
Remarks	..	Staple irregular and weak.	..	Slightly watered.	..	..	..

(b) Yarn:—

		UJJAIN (UJJAIN).					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	..	Clean ..	Fairly clean ..	Almost clean ..	Clean ..	Almost clean ..	Clean.
Evenness	..	Fairly even in lower counts.	..	Even in two lower counts.	Even ..	Even ..	Even.
Noppiness	..	Fairly free of nep.	Somewhat nappy.	Practically free of nep.	Nep-free	Fairly free of nep.	Nep-free.
Slubbiness	..	A little slubby.	Slubby	A trifle slubby.	..	..	..
Remarks	..	..	..	..	..	..	..

3. Spinning Test Details and Results:—See table 9 (a) on page 104.

II.—GRADER'S REPORT* FOR UJJAIN COTTON.

		UJJAIN (UJJAIN).					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Broach.	Broach.	Broach.	Broach.	Broach.	Oomra.
Class ..	.. ..	Fully good.	Fully good to fine.	Fully good.	Fully good.	Fully good.	Fully good.
Colour ..	.. ..	White.	White.	Whitish.	White.	White.	Fairly white.
Staple Length	.. ..	7 inch.	4 1/2 inch.	4 1/2 inch.	4 inch.	4 inch.	3 1/2 inch.
Staple Strength	.. ..	Fair.	Fair.	..	Fair.	Good.	Good.
Regularity ..	.. ..	Fair.	Good.	Irregular.	Very fair.	Fair.	Good.
Value above or below contract rate	.. ..	Rs. 10 off.	Rs. 20 on.	Rs. 5 off.	Rs. 5 off.	Rs. 20 on.	Rs. 18 on.
Basis ..	.. ..	Rs. 200.	Rs. 220.	Broach F. G. April-May 1933.	Rs. 190.9%	Rs. 252.	Rs. 201.
Date of Valuation	.. ..	5-2-31.	10-2-32.	..	22-1-34.	8-2-35.	4-1-36.
Remarks ..	.. ..	..	..	Silky with fine fibres; leafy.	..	..	..

* Report since 1932-33 is made up by the mill supplying the sample.

Table 9 (a).—SPINNING TEST RESULTS FOR UJJAIN COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE (°F.)	RELATIVE HUMIDITY (%)		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Draft.	Turns per inch.	LEA.			DRAUGHT.			Evenness Class.	Steps per yard.	Turns per inch Actual.			Spinning Room.	Testing Room.
															Counts Actual.	Strength (lbs.)	Count Strength	Work of Machine (inch-lb.)	Count Work Product.								
909	Ujjain ..	1930-31	2-2-31	10	10	11.1	10.1	0.2	20.2	0	194	..	5.21	12.63	9.9	125.0	1237	10.0	247.2	2472	3	2.0	12.2	81	65	68	
909	Ujjain ..	1930-31	2-2-31	12	12	..	..	..	..	8	180	..	5.43	13.92	12.1	90.7	1097	12.0	107.0	2371	4	2.5	13.6	81	67	69
909	Ujjain ..	1930-31	2-2-31	14	14	..	..	..	..	7	176	..	6.28	16.08	13.7	79.5	1089	13.0	154.4	2146	6	2.5	14.6	82	70	74
1251	Ujjain ..	1931-32	2-2-32	12	10	10.9	11.4	0.5	21.5	44	187	7250	6.22	13.92	12.1	87.1	1054	11.8	100.0	2312	4	2.0	13.3	82	69	71	
1251	Ujjain ..	1931-32	4-2-32	14A	14A	..	..	..	..	42	175	7500	6.38	15.09	13.5	80.1	1081	13.6	173.2	2356	5	1.2	14.5	81	66	70
1251	Ujjain ..	1931-32	4-2-32	14B	14B	..	..	..	..	42	183	7800	6.41	15.07	13.4	91.3	1223	13.8	163.4	2338	5	2.2	15.3	81	66	70
1670	Ujjain ..	1932-33	22-2-33	12	10	11.9	9.6	0.4	20.0	7	190	7350	5.55	13.92	11.9	100.1	1191	12.2	205.2	2503	3	1.8	13.6	83	69	70	
1670	Ujjain ..	1932-33	24-2-33	14	14	..	..	..	..	80	190	8300	6.58	15.97	14.3	84.3	1205	14.1	178.4	2515	4	1.2	15.6	82	67	72
2107	Ujjain ..	1933-34	30-1-34	10	10	11.1	10.8	0.2	20.8	0	202	7000	5.42	12.63	10.0	153.7	1597	10.1	280.4	2832	3	0.8	12.2	70	67	67	
2107	Ujjain ..	1933-34	29-1-34	12A	12A	..	..	..	..	0	197	7450	5.32	13.92	11.8	133.7	1578	12.0	236.4	2836	3	0.5	13.4	80	67	72
2107	Ujjain ..	1933-34	29-1-34	12B	12B	..	..	..	..	7	200	8000	5.43	14.68	12.1	130.3	1649	12.0	243.2	2916	3	0.5	14.2	79	67	72
2107	Ujjain ..	1933-34	1-2-34	14	14	..	..	..	..	51	193	8200	6.34	15.97	14.3	106.3	1520	14.1	188.8	2602	4	0.5	15.4	82	61	68
2664	Ujjain ..	1934-35	18-2-35	12	9	10.4	11.1	0.2	20.5	0	200	7600	5.32	13.92	12.2	120.4	1409	12.0	237.2	2846	3	2.0	13.5	79	68	68	
2664	Ujjain ..	1934-35	18-2-35	14A	14A	..	..	..	..	7	182	7500	5.10	14.98	14.3	99.0	1421	11.1	202.0	2848	4	1.5	14.8	80	68	70
2664	Ujjain ..	1934-35	18-2-35	14B	14B	..	..	..	..	0	192	8200	5.10	15.97	14.0	111.2	1557	14.1	203.6	2871	4	2.0	15.2	80	68	68
2664	Ujjain ..	1934-35	22-2-35	16	16	..	..	..	..	36	180	7000	5.05	15.97	16.4	69.0	1141	10.0	165.2	2742	5	1.8	15.5	80	70	71
3028	Ujjain ..	1935-36	10-1-36	12	10	11.6	11.4	0.2	21.8	0	198	7500	5.30	13.92	11.0	123.0	1464	12.2	226.8	2767	4	0.5	13.0	79	70	70	
3028	Ujjain ..	1935-36	11-1-36	14A	14A	..	..	..	..	15	180	8820	5.30	14.98	14.3	92.8	1327	14.2	190.4	2704	4	0.5	14.8	78	65	65
3028	Ujjain ..	1935-36	11-1-36	14B	14B	..	..	..	..	20	166	8000	5.30	15.97	14.3	110.2	1570	14.0	202.4	2834	4	0.8	15.0	78	65	64

* Diameter of ring frame front roller 1". Diameter of rings 1½".
† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

9 (b).—UJJAIN (Mandsaur) COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample Cotton. No.	Place.	Season.	Sample Cotton. No.	Place.	Season.
966	Ujjain	Sujalpur	2146	Ujjain	Mandsaur
1248	"	"	2666	"	"
970	"	Mandsaur	3064	"	"
1601	"	"			

I.—SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room* :—Up to 1934-35 inclusive :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room* :—Upto 1933-34 inclusive :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	UJJAIN (SUJALPUR).		UJJAIN (MANDSAUR).				
	1930-31.	1931-32.	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	White to creamy-white.	Creamy-white.	Creamy-white.	White brightish.	White to creamy-white; brightish.	White.	White to creamy-white.
Cleanliness ..	Leafy; somewhat stained.	Fairly leafy; a good deal stained.	Leafy; stained.	Somewhat leafy.	Fairly clean.	Fairly leafy.	Somewhat leafy; A little stained.
Feel ..	..	Softish.	Goodish.	Roughish.	Good.	Good.	Roughish.
Ginning and neppiness.	Fairly well-ginned.	Fairly well-ginned.	Fairly well-ginned.	Good.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds ..	1.6 % unginned.	1.25 % mainly unginned.	2 % unginned.	3 % unginned.	..	Contains 2.9 % seeds and kapas.	..
Card sliver ..	Comparatively clean	Almost clean.	..	Clean.	Clean.	Clean.	Fairly clean.
Card web ..	First class ..	Slightly nappy.	..	Fairly good; considerable fly shedding.	Good.	Good.	Good.
Weight of 10 flat strips.	17.2 grams ..	22.1 grams ..	..	20.1 grams ..	15.7 grams ..	19.6 grams ..	18.4 grams.
Remarks ..	Fully-pressed.	..	..	Excessive yarn breakage.	..	..	..

(b) Yarn :—

	UJJAIN (SUJALPUR).		UJJAIN (MANDSAUR).				
	1930-31.	1931-32.	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Clean.	Fairly clean.	Clean.	Clean.	Clean.	Almost clean.	Clean.
Evenness ..	Even.	Fairly even.	Fairly even.	Fairly even.	Even in two lower counts.	Fairly even.	Even.
Neppiness ..	Fairly free of nep.	A little nappy.	..	Almost free.	Free of nep.	Practically nep-free.	Free of nep.
Slubbiness ..	..	..	..	..	..	..	A little slubby.
Remarks ..	..	..	A little leafy.	..	..	..	..

3. Spinning Test Details and Results :—See Table 9 (b) on page 107.

II.—GRADER'S REPORT* FOR UJJAIN COTTON.

		UJJAIN (SUGARFEE).		UJJAIN (MANDSAUR).				
		1930-31.	1931-32.	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Breach.	Breach.	Breach.	Oomra.	Oomra.	Breach.	Oomra.
Class	.. ..	Fully good.	Fully good to fine.	Fully good.	Fine.	Fine.	Fully good.	Fully good.
Colour	.. ..	White.	White.	White.	White.	White.	White.	Dull White.
Staple Length	.. ..	$\frac{7}{8}$ inch.	$\frac{11}{16}$ inch.	$\frac{7}{8}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{11}{16}$ inch.
Staple Strength	.. ..	Fair.	Fair.	Fair.	Fair.	Fair.	Good.	Fair.
Regularity	.. ..	Fair.	Good.	Fair.	Fair.	Fair.	Fair.	Irregular.
Value above or below contract rate	..	Rs. 10 off.	Rs. 20 on.	Rs. 10 off.	Rs. 10 on	Par.	Rs. 5 on.	Rs. 5 on.
Basis	.. ..	Rs. 200.	Rs. 220.	Rs. 200.	Rs. 188.	Rs. 183.	Rs. 232.	Rs. 182.
Date of Valuation	.. ..	5-2-31.	10-2-32.	5-2-31.	..	15-2-34.	8-2-35.	30-1-36.
Remarks	.. ..	..	..	..	..	..	..	..

* Report since 1932-33 is made up by the mill supplying the sample.

Table 9 (b)—SPINNING TEST RESULTS FOR UJAIN COTTON.

Sample No.	Cotton.	Season.	Date of spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS *				VARY TEST RESULTS.						SAMPLE WYOM. HUMIDITY (P.F.)	RELATIVE HUMIDITY (P.F.)			
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.	Yarn Packages per 100 spindles per hour.	Front Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Twist.	Furns per inch.	L.S.		HALLISTIC.		Revolutions Class.			Neps per yard.	Turns per inch.	
															Counts Actual.	Strength (Lbs.)	Counts Strength.	Counts Actual.						W.P. (Lbs.)	Count-Work Product.
906	Sajapur	1930-31	31-1-31	10	10	10.3	9.7	0.4	10.3	10	106	..	5.42	12.63	10.0	125.5	125.5	10.1	219.6	2241	3	1.2	12.3	64
906	"	1930-31	31-1-31	12	10	..	..	..	..	24	186	..	5.10	17.02	11.4	107.5	1247	11.7	205.2	2401	4	1.5	13.6	71
906	"	1930-31	31-1-31	14	10	..	..	..	..	40	174	..	6.67	15.66	13.8	77.3	1067	14.3	159.2	2277	5	2.0	14.9	63
1248	Sajapur	1931-32	2-2-32	12	10	11.6	12.2	0.6	22.9	65	143	7200	6.25	13.92	12.2	84.7	1072	12.1	191.8	2356	4	3.5	13.0	66
1248	"	1931-32	2-2-32	14A	10	..	..	..	..	24	175	7200	6.54	13.68	13.6	82.7	1125	13.9	159.6	2219	4	3.0	14.5	68
1248	"	1931-32	3-2-32	14B	10	..	..	..	..	26	185	7200	6.53	13.97	13.7	96.9	1346	14.1	167.2	2354	4	2.8	15.6	65
970	Mandsaur	1930-31	3-2-31	10	10	13.1	9.0	0.5	22.1	110	194	..	5.10	12.63	10.1	113.6	1167	10.1	270.1	2327	4	2.5	12.3	68
970	"	1930-31	3-2-31	12	10	..	..	..	..	16	182	..	5.32	13.92	11.9	90.7	1076	11.8	190.4	2247	5	2.7	13.6	67
970	"	1930-31	3-2-31	14	10	..	..	..	..	33	176	..	6.11	15.08	14.0	59.4	414	14.2	149.0	2124	6	2.5	14.6	75
1401	Mandsaur	1932-33	4-1-33	10	10	12.8	12.0	0.6	23.8	73	191	6700	5.31	12.61	10.0	71.1	711	10.0	194.8	1923	4	1.0	12.1	69
1401	"	1932-33	4-1-33	12A	10	..	..	..	..	102	176	6500	5.42	13.92	11.9	53.7	639	11.9	169.2	2013	5	1.0	13.4	72
1401	"	1932-33	5-1-33	12B	10	..	..	..	..	87	177	7150	5.52	14.63	12.1	62.0	720	12.3	160.4	2119	5	1.2	14.1	74
2146	Mandsaur	1933-34	10-2-34	10	10	8.9	10.8	0.3	19.0	55	193	6300	5.21	12.63	10.3	94.2	979	10.0	271.6	2616	3	0.8	12.2	72
2146	"	1933-34	20-2-34	12	10	..	..	..	..	15	190	7200	5.53	13.92	11.9	81.2	906	12.1	205.2	2453	3	0.8	13.5	72
2146	"	1933-34	20-2-34	14	10	..	..	..	..	53	178	7700	6.10	15.97	14.2	71.7	1019	14.4	161.4	2367	5	1.0	13.5	72
2066	Mandsaur	1934-35	10-2-35	10	10	12.7	10.3	0.3	21.9	0	202	7000	5.12	12.63	10.0	119.7	1197	9.0	256.8	2512	4	1.0	12.0	69
2066	"	1934-35	18-2-35	12	10	..	..	..	..	15	196	7450	5.31	13.92	12.5	50.0	1000	12.4	194.8	2465	5	1.5	13.5	69
2066	"	1934-35	18-2-35	14	10	..	..	..	..	51	180	8000	6.15	15.97	14.2	81.6	1169	14.1	171.0	2457	5	1.2	15.4	67
3064	Mandsaur	1935-36	4-2-36	8A	10	0.4	13.4	0.3	21.7	33	186	5500	5.00	11.31	8.2	55.4	454	8.2	196.0	1807	3	0.8	11.2	63
3064	"	1935-36	4-2-36	8B	10	..	..	..	..	33	192	6300	5.20	12.67	8.1	84.7	636	8.2	249.8	2040	3	0.8	12.2	65
3064	"	1935-36	4-2-36	10	10	..	..	..	..	27	174	7100	5.44	14.29	10.2	72.2	730	10.0	203.0	2080	4	0.5	14.5	63

* Diameter of ring frame front roller: 3". Diameter of ring: 14".
 † Y. is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

10.—MOGLAI COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.	Weight (lbs.)
1604	Moglai	Partur	1932-33	11
2145	"	Partur	1933-34	9
2665	"	Partur	1934-35	12
3029	"	Partur	1935-36	11

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Up to 1934-35 (inclusive) ; Porcupine, Crighton (twice), Hopper feeder, Scutcher (3 times). 1935-36 ; Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive); Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36 ; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	MOGLAI			
	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white.	White to creamy-white.	Dullish white to creamy-white.	White to creamy-white; brightish.
Cleanliness	Leafy.	Leafy.	Leafy.	Leafy.
Feel	Good.	Good roughish.	Good.	Good.
Ginning and Neppiness ..	Good.	Well-ginned.	Well-ginned.	Fairly well-ginned.
Seeds	2% small size, ginned, partly ginned and unginned.	1.1% unginned.	..	..
Card sliver	Almost clean.	Good.	Clean.	Clean.
Card web	Good.	Good.	Good.	Even and nep-free.
Weight of 10 flat strips ..	17.9 grams.	15.9 grams.	20.4 grams.	13.7 grams.
Remarks	Spots of stain and un-ripe fibres noticeable.	8 lb. sample.	..	..

(b) Yarn :—

	MOGLAI			
	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.	Fairly clean.
Evenness	Even.	Somewhat uneven.	Fairly even.	Even in the lower counts.
Neppiness	Practically nep-free.	Free of nep.	Almost free of nep.	Free of nep.
Slubbiness .. ..	..	..	A little slubby.	A little slubby.
Remarks .. ..	..	..	..	..

3. *Spinning Test Details and Results*.—See Table 10 on page 110.

II.—GRADER'S REPORT* FOR MOGLAI COTTON.

		MOGLAI.			
		1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Oomra.	Oomra.	Oomra.	Oomra.
Class ..	.. ..	Fine.	Fine.	Fine.	Fully good.
Colour ..	.. ..	White.	Dull white.	White.	Fairly white
Staple Length ..	.. ..	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{1}{2}$ inch.	$\frac{3}{4}$ inch.
Staple Strength	.. ..	Fair.	Fair.	Fair.	F. Good.
Regularity ..	.. ..	Fair.	Fair.	Fair.	Good.
Value above or below contract rate	.. ..	Rs. 10 on	Rs. 10 off.	Rs. 5 on.	Rs. 3 on.
Basis ..	.. ..	Rs. 188.	Rs. 183.	Rs. 226.	Rs. 201.
Date of Valuation	.. ..	9-1-33.	15-2-34.	8-2-35.	4-1-36.
Remarks	.. ..	..	..	..	..

* Report since 1933-34 is made up by the mill supplying the sample.

TABLE 10.—SPINNING TEST RESULTS FOR MOGLAI COTTON.

Sample No.	Cotton.	Season.	Date of Spinning	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.								TEMPERATURE (°F)	RELATIVE HUMIDITY (%)				
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed ft. p. m.	Spindle Speed ft. p. m.	Draft.	Turns per inch.	LEA.			BALISTIC.			Evenness class.		Knots per yard.	Turns per inch. Actual.	Spinning Room.	Spinning Room.	Testing Room.
													Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Reaping (inch-lbs.)	Count-Work Product.							
1604	Moghal	1932-33	6-1-33	10A	10	11.9	10.3	0.6	21.4	73	182	6250	5.32	12.63	10.0	92.7	927	290.4	2204	4	1.2	12.0	81	74	74
1604	"	1932-33	6-1-33	12A		"	"	"	"	95	185	7100	5.33	13.92	11.6	78.7	913	184.8	2218	4	1.5	13.3	80	74	74
1604	"	1932-33	9-1-33	12B		"	"	"	"	102	190	7500	5.43	14.68	11.6	92.2	1070	190.4	2298	4	1.2	14.3	80	70	72
2145	Moghal	1933-34	19-2-34	10A	8	11.3	13.5	0.4	25.6	18	198	6800	5.21	12.63	10.0	89.4	894	291.0	2339	4	1.0	12.2	83	69	72
2145	"	1933-34	20-2-34	12A		"	"	"	"	58	190	7200	5.53	13.92	11.9	67.5	803	188.0	2237	5	0.8	13.5	81	86	71
2145	"	1933-34	20-2-34	12B		"	"	"	"	95	195	7700	5.63	14.68	12.0	84.4	1013	184.4	2231	5	1.5	14.2	81	88	72
2665	Moghal	1934-35	19-2-35	10A	10	9.7	10.6	0.5	19.6	27	202	6950	5.24	12.63	10.3	77.4	797	290.4	2304	4	1.8	12.1	80	67	68
2665	"	1934-35	19-2-35	12A		"	"	"	"	67	166	7000	5.38	13.92	12.4	61.9	644	175.2	2172	5	1.0	13.4	80	68	68
2665	"	1934-35	19-2-35	12B		"	"	"	"	36	188	7500	5.38	14.68	12.4	68.4	848	184.4	2268	5	1.2	14.2	81	69	70
3029	Moghal	1935-36	11-1-36	8	10	12.0	11.4	0.2	22.3	44	208	7000	5.00	11.31	8.2	105.4	864	290.4	2383	3	0.5	10.9	79	65	66
3029	"	1935-36	13-1-36	10A		"	"	"	"	9	198	7000	5.10	12.63	10.0	87.9	879	294.4	2344	4	0.8	12.1	79	63	67
3029	"	1935-36	17-1-36	10B		"	"	"	"	36	204	7500	5.10	13.58	10.2	100.3	1115	240.8	2408	4	0.5	13.0	79	61	61
3029	"	1935-36	13-1-36	12B		"	"	"	"	36	193	7500	5.08	14.68	11.8	84.4	996	199.0	2335	5	0.5	14.0	77	64	66

* Diameter of ring frame front roller— $\frac{1}{2}$ ". Diameter of ring— $\frac{1}{16}$ ".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

11.—WESTERNS COTTON.

These samples have been tested by arrangements with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.
2254	Westerns	Guntakal	1933-34.
2749	Westerns	Guntakal	1934-35.
3151	Westerns	Guntakal	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room.*—1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room.*—1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	WESTERNS.		
	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white; bright.	White to creamy-white; brightish.	White to creamy-white; dullish.
Cleanliness	Leafy.	Leafy.	Leafy.
Feel	Good.	Good smooth.	Good.
Ginning and neppiness ..	Well-ginned.	A trifle knotted.	Well-ginned.
Seeds	1.7% partly-ginned.	....	....
Card Sliver	Clean.	Clean.	Almost clean.
Card Web	Even and nep-free.	Even and nep-free.	Good.
Weight of 10 flat strips ..	13.8 grams.	18.2 grams.	13.6 grams.
Remarks .. .. .	....	....	....

(b) Yarn :—

	WESTERNS.		
	1933-34.	1934-35.	1935-36.
Cleanliness	Almost clean.	Clean.	Almost clean.
Evenness	Fairly even.	Fairly even.	Fairly even.
Neppiness	Free of nep.	Almost free of nep.	Almost free of nep.
Slubbiness .. .. .	....	....	....

3. *Spinning Test Details and Results* :—See Table 11 on page 113.

II.—GRADER'S REPORT* FOR WESTERNS COTTON.

		WESTERNS.		
		1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Breach.	July/Aug. Breach.	Breach April/May.
Class ..	.. ..	Strict fine.	Fine.	Fine.
Colour ..	.. ..	White.	White.	Brownish white.
Staple Length ..	.. ..	31/32 inch.	Barely 13/16 inch.	29/32 inch.
Staple Strength	.. ..	Good.	Fair.	Fairly Good.
Regularity ..	.. ..	Good.	Very irregular.	Regular.
Value above or below contract rate	.. ..	Rs. 35 on Apr./May Breach.	Rs. 25 on.	Rs. 35 on.
Basis ..	.. ..	Rs. 183.	Rs. 232.	Rs. 203.
Date of Valuation	.. ..	1st May 1934.	3-7-35.	20-4-36.
Remarks	.. ..	....	....	....

* The reports for 1933-34 and 1935-36 are made by the mill supplying the sample.

Table 11.—SPINNING TEST RESULTS FOR WESTERNS COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*					YARN TEST RESULTS.						TEMPERATURE (°F.)	RELATIVE HUMIDITY (%)				
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles	Front Roller Speed R. P. M.	Spindle Speed R. P. M.	Draft.	Turns per inch.	LEA.			BALLISTIC.				Turns per inch Actual.	Spiraling Room.	Testing Room.		
															Counts Actual.	Strength (lbs.)	Count-Strength	Count-Work (inch-lb.)	Count-Work Product.	Work of Spinning					Counts Actual.	Twines per yard.	Evenness Class.
2254	Westerns	1933-34	30-4-34	20	10	12.0	8.0	0.4	19.4	5	109	9350	0.07	17.98	19.4	81.5	1079	19.6	128.0	2309	4	1.2	17.4	88	66	72
2254	Westerns	1933-34	1-5-34	24						32	176	9500	5.67	19.73	24.1	62.8	1317	24.2	100.8	2479	1	1.5	19.3	88	70	71
2254	Westerns	1933-34	1-5-34	30						17	138	9750	0.04	23.11	29.3	47.5	1702	29.3	84.2	2167	5	1.2	22.3	88	60	70
2749	Westerns	1934-35	21-6-35	20	10	12.5	9.8	0.4	21.4	10	106	9650	5.83	17.98	19.6	85.0	1066	19.7	130.4	2569	4	2.0	17.4	87	74	79
2749	Westerns	1934-35	20-6-35	24						14	179	9800	5.32	19.72	23.1	67.1	1550	23.6	107.2	2530	4	1.8	10.0	87	71	81
2749	Westerns	1934-35	20-6-35	30						30	151	9600	0.53	23.11	30.1	47.1	1418	29.4	87.2	2504	5	1.5	22.4	85	77	74
3151	Westerns	1935-36	23-4-36	20	10	9.1	7.9	0.4	10.6	31	103	9550	5.05	17.98	20.5	67.5	1394	20.0	127.8	2356	4	1.2	17.2	88	60	70
3151	Westerns	1935-36	22-4-36	24						55	176	9650	5.67	19.73	24.5	52.5	1286	23.8	105.2	2501	1	1.2	19.0	90	69	60
3151	Westerns	1935-36	23-4-36	30						26	142	9800	0.04	23.20	29.4	45.9	1349	29.1	81.2	2421	5	1.0	22.0	89	63	72

* Diameter of ring frame front roller— $\frac{1}{2}$ ". Diameter of ring— $\frac{1}{16}$ ".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for a bulk sample spun under mill conditions it would be less than shown here.

12.—MIRAJ COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.
2532	Miraj.	Shedbal.	1933-34.
2750	Miraj.	Shedbal.	1934-35.
3270	Miraj.	Shedbal.	1935-36.

I.—SPINNING TESTS.

1. Treatment.

(a) *Blow-room*—1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*—1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	MIRAJ.		
	1933-34.	1934-35.	1935-36.
Colour	Creamy-white.	Creamy-white.	Creamy-white.
Cleanliness	Leafy.	Leafy.	Leafy.
Feel	Soft silky.	Poorish feel.	Good.
Ginning and neppiness ..	Well-ginned.	Somewhat knotted.	Somewhat knotted.
Seeds	$\frac{1}{2}\%$ partly-ginned.	..	..
Card sliver	Clean.	Almost clean.	Almost clean.
Card web	Even and nep-free.	Good.	Good.
Weight of 10 flat strips ..	15.5 grams.	16.3 grams.	15.0 grams.
Remarks .. .. .	..	..	..

(b) Yarn :—

	MIRAJ.		
	1933-34.	1934-35.	1935-36.
Cleanliness	Almost clean.	Almost clean.	Almost clean.
Evenness	Fairly even.	Even.	Even.
Neppiness	Free of nep.	Nep-free.	Practically free of nep.
Slubbiness .. .. .	..	..	A little slubby.

3. *Spinning Test Details and Results* :—See Table 12 on page 115.

II. GRADER'S REPORT* FOR MIRAJ COTTON.

		MIRAJ.	
		1933-34.	1935-36.
Contract valued under ..	..	Broach.	July/Aug. Broach.
Class ..	..	Fully good.	Fully good.
Colour ..	..	Creamy to light brown.	Brownish.
Staple Length ..	..	13/16 inch.	3/4 inch.
Staple Strength ..	..	Fair.	Good.
Regularity ..	..	..	Fair.
Value above or below contract rate ..	..	Rs. 15 on April/May Broach.	Rs. 5 off.
Basis ..	..	Rs. 183.	Rs. 220.
Date of Valuation ..	..	1-5-34.	1-7-36.
Remarks ..	..	..	..

* The report for 1933-34 and 1935-36 is made by the mill supplying the sample.

Table 12.—SPINNING TEST RESULTS FOR MIRAJ COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.										VARY TEST RESULTS.										TEMPERATURE HUMIDITY. (°F.)	RELATIVE HUMIDITY. (%)	S.P. in R.	S.P. in R.	Tweeling Room.
				Weight of Sample, lbs.	Counts X nominal.	Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakage per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	Counts Actual.	Strength lbs.	Count-throw.	Counts Actual.	Work of Rupture (lb./in.)	Count Product.	Fineness Class.	Neps per yard.	Turns per inch.	S.P. in R.	S.P. in R.							
2253	Miraj	1935-34	30-4-34	10	20	13.0	9.1	0.4	21.2	16	106	9550	5.32	17.95	19.8	69.0	1366	20.0	211.8	2226	5	1.0	17.3	89	68	08	08					
2253	Miraj	1935-34	1-5-34	24A						36	176	9500	6.58	16.75	21.8	46.4	1151	24.2	81.2	2507	5	1.2	18.9	89	70	71	71					
2253	Miraj	1935-34	1-5-34	21B						32	178	9900	6.58	20.74	21.8	61.5	1272	24.7	86.4	2508	5	1.0	10.9	89	69	69	69					
2750	Miraj	1934-35	21-6-35	20		10.6	9.2	0.4	10.2	36	105	9550	5.93	17.64	19.7	63.1	1831	20.4	132.8	2703	3	0.5	17.3	88	76	80	80					
2750	Miraj	1934-35	21-6-35	24						41	178	9550	6.25	19.75	22.0	71.5	1937	23.5	114.8	2708	4	0.8	18.8	89	71	74	74					
3270	Miraj	1935-36	14-7-36	10		11.6	8.0	0.3	10.7	6	198	8909	5.42	15.97	18.0	89.9	1493	16.3	143.6	2311	3	1.2	15.2	87	72	71	71					
3270	Miraj	1935-36	18-7-36	20						21	102	9500	5.20	17.08	20.3	63.3	1293	20.1	110.2	2215	4	0.8	16.9	87	73	71	71					
3270	Miraj	1935-36	14-7-36	24						50	162	9000	6.10	19.75	24.2	43.9	1062	23.0	89.8	2110	4	1.0	18.6	87	71	70	70					

* Diameter of Ring Frame front roller = 7/8". Diameter of back roller = 1/2".

* It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

† Diameter of Ring Frame front roller—7/8". Diameter of Ring—1 5/8".

13.—SURAT COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Sample No.	Cotton.	Season.
1075	Surat	.. 1930-31	2752	Surat	.. 1934-35
1747	Surat	.. 1932-33	3142	Surat	.. 1935-36
2278	Surat	.. 1933-34			

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room* :—1930-31 :—Porcupine, Crighton (once only), Hopper, Scutcher (3 times).

1932-33 and 1933-34 :—As above but two passages in the Crighton. 1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage roller, Hopper feeder, Scutcher (3 times).

(b) *Card-room* :—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report.

(a) Cotton :—

	SURAT.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White ; bright.	White to creamy-white.	White ; bright.	White ; bright.	White ; bright.
Cleanliness	Fairly clean.	Fairly clean.	A little leafy.	Fairly clean.	A little leafy.
Feel	Good-bodied.	Soft and bodied.	Good silky.	Good soft.	Smooth-bodied.
Ginning and Noppiness ..	Well-ginned.	Very well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	1.25% unginned.	0.8%.	..	..	Contains a few unginned seeds.
Card Sliver	Clean.	Clean.	Almost clean.	Clean.	Clean.
Card Web	Good.	Even and nep-free.	Good.	Even and nep-free.	Even and nep-free.
Weight of 10 flat strips ..	6.7 grams ; very light.	12.8 grams.	15.6 grams.	15.0 grams.	11.7 grams.
Remarks	8-lb. sample.	..	..	..	..

(b) Yarn :—

	SURAT.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.	Clean.	Clean.
Evenness	Even.	Even.	Even.	Even.	Fairly-even.
Noppiness	Nep-free.	Free of nep.	Free of nep.	Practically nep-free.	Almost free of nep.
Slubbiness .. ..	..	..	..	..	..
Remarks .. ..	..	..	..	..	..

3. Spinning Test Details and Results.—See Table 13 on page 118.

II.—GRADER'S REPORT* FOR SURAT COTTON.

		SURAT.				
		1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under
Class
Colour
Staple Length
Staple Strength
Regularity
Value above or below contract rate
Basis
Date of Valuation
Remarks

* Report since 1932-33 is made by the Mill supplying the sample.

Table 13.—SPINNING TEST RESULTS FOR SURAT COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGE.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE (°F.).		RELATIVE HUMIDITY(%)	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Yarn Breakages per 100 spindles per hour.	Front Roller speed R. Y. M.	Spindle speed R. Y. M.	Draft.	Turns per inch.	TEST.			Evenness Class.	Neps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.	Testing Room.				
															Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)							Count-Work Product.			
1075	Surat.	1930-31	10-6-31	24	8	8.2	6.6	0.7	14.8	20	182	9600	5.91	10.73	23.7	63.2	1408	24.5	103.2	2928	4	0.7	18.7	92	69	65	
1075	Surat.	1930-31	10-6-31	30	..	..	..	..	..	40	156	9950	7.43	23.11	30.1	46.3	1394	30.5	81.8	2405	5	0.5	22.0	92	83	60
1747	Surat.	1932-33	28-4-33	24	10	6.4	7.4	0.5	13.8	68	178	9600	5.55	19.73	23.0	65.5	1565	24.2	106.0	2505	3	1.2	19.3	87	64	69	
1747	Surat.	1932-33	2-5-33	30	..	..	..	..	..	89	168	10500	6.89	23.11	30.3	42.7	1294	20.7	83.4	2447	4	2.0	22.0	89	67	60
2278	Surat.	1933-34	10-5-34	20	10	5.8	8.5	0.3	14.0	5	166	9600	5.91	17.98	20.2	85.9	1785	19.8	135.8	2680	3	1.0	17.1	89	67	69	
2278	Surat.	1933-34	10-5-34	24	..	..	..	..	..	27	178	9350	5.42	19.73	23.8	69.3	1630	23.9	108.2	2586	4	1.2	18.8	90	65	68
2278	Surat.	1933-34	16-6-34	30	..	..	..	..	..	13	162	9550	6.56	21.86	29.5	51.4	1510	29.0	87.6	2540	5	1.2	20.9	90	67	70
2752	Surat.	1934-35	21-6-35	20	10	6.6	7.0	0.2	14.1	0	195	9350	6.05	17.98	20.5	88.7	1818	20.4	140.4	2694	3	1.0	17.3	85	70	73	
2752	Surat.	1934-35	25-6-35	24	..	..	..	..	..	18	170	9350	5.45	19.73	23.6	73.7	1739	23.2	124.0	2617	4	1.2	18.9	86	72	70
2752	Surat.	1934-35	25-6-35	30	..	..	..	..	..	17	160	9600	6.71	21.86	29.7	32.4	1650	29.5	94.4	2765	4	1.5	20.8	87	73	72
3142	Surat.	1935-36	17-4-36	20	10	4.4	7.0	0.3	11.3	0	192	9300	6.95	19.78	20.5	78.8	1615	20.3	127.8	2594	3	1.2	17.3	88	70	70	
3142	Surat.	1935-36	16-4-36	24	..	..	..	..	..	14	174	9500	6.33	19.73	22.9	73.6	1665	22.8	116.2	2646	4	0.8	18.9	88	69	74
3142	Surat.	1935-36	16-4-36	30	..	..	..	..	..	17	144	8550	6.76	21.86	30.1	47.2	1421	30.8	86.2	2655	5	1.5	20.8	87	64	73

* Diameter of ring frame front roller—7". Diameter of ring—14".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under VIII conditions it would be less than shown here.

14.—NAVSARI COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs.)
1076	Navsari	1930-31	11
1778	„	1932-33	20
3141	„	1935-36	11

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—1930-31. Porcupine, Crighton (once only), Hopper Scutcher (3 times).

1932-33 :—As above but two passages in the Crighton.

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1932-33. Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1935-36.—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

—	Navsari.		
	1930-31.	1932-33.	1935-36.
Colour	White ; Bright.	White ; very bright.	White ; Bright.
Cleanliness	Fairly clean.	Fairly clean.	Clean.
Feel	Good-bodied.	Silky and bodied.	Good.
Ginning and Neppiness ..	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	0.5% unginned.	....	....
Card Sliver	Clean ; Silky.	Clean and full.	Clean.
Card Wob	Very good.	Even and nep-free.	Even and nep-free.
Weight of 10 flat strips ..	6.5 grams ; very light.	15.1 grams.	11.7 grams.
Remarks	8 lbs. sample.	....	....

(b) *Yarn* :—

—	Navsari.		
	1930-31.	1932-33.	1935-36.
Cleanliness	Clean.	Clean.	Clean.
Evenness	Even.	Fairly even.	Even in the lower counts.
Neppiness	Free of nep.	Free of nep.	Almost free of nep.
Slubbiness .. ..	....	....	....
Remarks .. ..	....	....	....

3. *Spinning Test Details and Results*.—See Table 14 on page 120.

II. GRADER'S REPORT FOR NAVSARI COTTON.

1930-31.										1932-33.*										1935-36.*									
Contract valued under										Broach.										F.G.M.G. Broach Hedge Contract No. 2.									
Class ..										Fine.										Strict fine.									
Colour ..										White.										Clean white.									
Staple Length ..										1 1/4".										1 1/4".									
Staple Strength ..										Fair.										Good.									
Regularity ..										Fair.										Good.									
Value above or below contract rate										Rs. 90 on.										Rs. 50 on.									
Basis ..										Rs. 160.										July/August Rs. 205.									
Date of Valuation ..										10-6-31.										20-5-33.									
Remarks ..										....										....

* Reports for 1932-33 and 1935-36 are made by the mill supplying the sample.

Table 14.—SPINNING TEST RESULTS FOR NAVSARI COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Table 14.—SPINNING TEST RESULTS FOR NAVSARI COTTON																											
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS. *						YARN TEST RESULTS.						TEMPERATURE (°F.)	RELATIVE HUMIDITY (%)				
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Yarn Breakages per 100 Spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	LEA.			BALISTIC.			Evenness Class.			Reps per yard.	Turns per Inch. Actual.	Spinning Room.	Testing Room.
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.							
1076	Navsari	1930-31	10-6-31	24	8	6.2	7.6	0.6	13.0	5	182	9800	5.31	19.73	23.1	60.6	1538	23.5	103.2	2425	4	1.5	19.1	92	69	67	
1076	"	1940-31	10-6-31	30	..	..	..	..	..	36	158	9950	7.50	23.11	30.5	44.0	1342	30.6	80.4	2460	5	1.2	22.4	92	68	68
1778	Navsari	1932-33	24-5-33	24	10	7.5	8.3	0.4	15.5	55	170	9700	5.32	19.73	23.7	60.2	1509	23.4	110.6	2388	4	1.0	18.9	80	69	70	
1778	"	1932-33	27-5-33	30	..	..	..	..	..	33	157	9700	6.84	23.11	30.0	45.3	1359	29.7	82.2	2441	5	1.5	22.3	90	67	68
3141	Navsari	1935-36	15-4-36	20	10	3.4	7.1	0.3	10.6	16	192	9350	5.85	17.98	19.9	87.8	1747	19.7	136.6	2601	3	1.0	17.5	90	67	71	
3141	"	1935-36	15-4-36	24	..	..	..	..	..	23	177	9450	5.08	19.73	23.8	66.5	1685	23.0	112.0	2643	4	1.2	19.1	88	66	72
3141	"	1935-36	15-4-36	30	..	..	..	..	..	10	144	9700	7.14	21.86	29.5	47.9	1413	30.0	80.2	2676	5	1.2	21.4	80	66	74

* Diameter of ring frame front roller—1 1/4". Diameter of rings—1 1/4".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

15 (a).—TIRUPPUR CAMBODIA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1077	Tiruppur Cambodia	1930-31.
1748	Tiruppur Cambodia	1932-33.
2277	Tiruppur Cambodia	1933-34.
2753	Tiruppur Cambodia	1934-35.
3269	Tiruppur Cambodia	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room* : Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). In 1930-31, it was passed only once thro' the Crighton.

1934-35 and 1935-36 : Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room* : Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 : As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	TIRUPPUR CAMBODIA.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white to creamy.	Creamy-white ..	White to creamy-white.	White to creamy-white; bright.	White to creamy-white.
Cleanliness	Fairly clean; occasional stain.	Clean	Fairly clean; occasionally stained.	Clean	Fairly clean; slightly stained.
Feel	Good-bodied ..	Good soft ..	Good smooth ..	Good bodied ..	Softish.
Ginning and Neppiness ..	Well-ginned, but slightly neppy.	Well-ginned ..	Slightly knotted in ginning.	Fairly well-ginned.	A little knotted.
Seeds	Clean	Soft and clean ..	Almost clean ..	Clean and soft ..	Almost clean.
Card sliver	Well-ginned, but slightly neppy and cloudy.	A trifle both neppy and uneven.	Neppy	Somewhat neppy and uneven.	Somewhat neppy.
Card web	19.0 grams.	25.8 grams.	26.5 grams	28.3 grams	20.1 grams.
Weight of 10 flat strips	.. ..	.. ..	Well-watered ..	.. ..	Well-watered at the time of pressing.
Remarks					

(b) Yarn :—

	TIRUPPUR CAMBODIA.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean ..	Almost clean ..	Almost clean ..	Clean	A little leafy.
Evenness	Even	Even	Even	Even	Even.
Neppiness	A little neppy ..	A little neppy ..	Somewhat neppy.	Neppy	Neppy.
Slubbiness .. ..	.. ..	.. ..	Somewhat slubby.	.. ..	Fairly slubby.
Remarks .. ..	.. ..	.. ..	.. ..	.. ..	.. ..

3. Spinning Test Details and Results.—See Table 15 (a) on page 123.

II.—GRADER'S REPORT* FOR TRUPPUR CAMBODIA COTTON.

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TRUPPUR CAMBODIA						
		1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	Broach.	F. G. M. G. Broach Hedge Contract No. 2.	Broach July/Aug. 1934.	Broach July/Aug. 1935.	Broach.
Class	.. ..	Fine.	Fine.	White; bright.	Good.	Fully good to fine.
Colour	.. ..	Slightly cream.	Clean creamy-white.	Very clean.	White creamy.	Creamy.
Staple Length	.. ..	15/16".	31/32" average.	Full 31/32".	31/32".	Barely 31/32".
Staple Strength	.. ..	Fair.	Good.	Good.	Very good.	Good.
Regularity	.. ..	Fair.	Even.	Very even.	Regular.	Regular.
Value above or below contract rate	.. ..	Rs. 75 on.	Rs. 60 on.	Rs. 70 on.	Rs. 88 on.	Rs. 45 on.
Basis	.. ..	Rs. 100.	F. G. M. G. Broach Contract No. 2 April/May, Rs. 182.	Rs. 108.	Broach July/Aug. 1935.	Broach July/Aug. 1936.
Date of Valuation	.. ..	10-6-31.	18-4-33.	30-5-34.	..	15-7-36.
Remarks	.. ..	..	Silky.	..	..	..

* Report since 1932-33 is made by the mill supplying the sample.

Table 15 (a) — SPINNING TEST RESULTS FOR TRUPPUR CAMBODIA COTTON.

123

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS. *				YARN TEST RESULTS.								TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).					
				Counts Nominal.	Weight of Sample (lbs.).	WASTE PERCENTAGES.			Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	LEA.			DILASTIC.					Neps per yard.	Turns per inch actual.	Spinning Room.	Spinning Room.	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.						Total Loss.†	Counts Actual.	Strength (lb.).	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).							Count-Work Product.
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27			
1077	Cambodia	1930-31	11-6-31	8	6.0	10.5	0.6	10.4	5	181	9750	0.18	19.73	25.2	56.5	1424	24.0	68.2	2415	4	3.2	18.9	92	66		
1077	Cambodia	1930-31	11-6-31	30	..	..	..	..	16	154	9800	7.65	23.11	29.6	47.6	1400	30.3	84.8	2560	5	3.2	22.3	91	64
1746	Cambodia	1932-33	28-4-33	24	5.3	12.0	0.5	17.1	45	178	9000	5.60	19.73	23.9	59.5	1422	23.6	105.8	2518	3	2.0	19.0	87	63		
1749	Cambodia	1932-33	2-5-33	30	..	..	..	..	70	193	10300	7.06	23.11	30.1	43.1	1297	30.4	79.0	2402	4	3.5	22.0	89	66
2277	Cambodia	1933-34	16-5-34	20	5.3	13.2	0.3	18.1	10	196	9600	6.19	17.98	20.0	82.2	1614	20.0	132.0	2610	3	3.8	17.2	89	67		
2277	Cambodia	1933-34	16-5-34	24	..	..	..	..	0	173	9560	6.22	19.73	23.9	67.0	1601	24.4	103.8	2533	4	4.0	16.9	90	63
2277	Cambodia	1933-34	16-5-34	30	..	..	..	..	13	182	9550	7.08	21.86	30.7	45.9	1469	30.2	82.2	2491	5	3.2	21.2	90	69
2753	Cambodia	1934-35	24-6-35	20	6.2	14.2	0.4	10.8	5	194	9300	6.19	17.98	10.7	90.2	1694	10.8	137.8	2728	3	5.0	17.1	88	69		
2753	Cambodia	1934-35	26-6-35	24	..	..	..	..	27	180	9650	5.33	19.73	23.7	72.8	1725	23.7	116.0	2749	4	5.8	19.1	87	74
2753	Cambodia	1934-35	26-6-35	30	..	..	..	..	23	181	9650	6.71	21.86	29.2	55.4	1618	29.7	90.6	2691	4	6.0	21.0	87	74
3259	Cambodia	1935-36	11-7-36	20	7.0	10.3	0.3	16.9	21	180	9300	6.22	17.98	10.9	80.5	1781	10.8	127.8	2530	3	4.8	17.2	87	72		
3259	Cambodia	1935-36	15-7-36	24	..	..	..	..	0	174	9650	5.67	19.73	23.7	69.6	1650	23.9	105.0	2510	4	4.2	19.1	88	73
3259	Cambodia	1935-36	15-7-36	30	..	..	..	..	17	156	9550	7.03	21.86	30.0	51.1	1533	29.7	84.6	2513	5	5.0	21.1	87	73

* Diameter of ring frame front roller—7". Diameter of rings—1.4".

† It is to be noted that the total loss is for a small sample weighing 10 lbs., or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

15 (b).—TIRUPPUR CAMBODIA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.
2373	Cambodia	Tiruppur	1933-34
2745	Cambodia	Tiruppur	1934-35
3149	Cambodia	Tiruppur	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room.*—1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room.*—1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

	TIRUPPUR CAMBODIA.		
	1933-34.	1934-35.	1935-36.
Colour	Creamy-white ; bright.	White to creamy-white ; brightish.	White to creamy-white ; brightish.
Cleanliness	Clean ; somewhat stained.	Clean with occasional stains.	Clean.
Feel	Good smooth.	Good smooth.	Good smooth.
Ginning and neppiness	Slightly knotted.	Fairly well-ginned.	Fairly well-ginned.
Seeds .. .. .	..	..	..
Card Sliver	Clean and soft.	Clean.	Clean.
Card Web	Cloudy and neppy.	Slightly neppy and uneven.	Slightly neppy.
Weight of 10 flat strips	24.7 grams.	29.7 grams.	20.3 grams.
Remarks .. .. .	..	..	..

(b) *Yarn* :—

	TIRUPPUR CAMBODIA.		
	1933-34.	1934-35.	1935-36.
Cleanliness	Almost clean.	Almost clean.	A little leafy.
Evenness	Even in the two lower counts.	Fairly even.	Fairly even.
Neppiness	Neppy.	Neppy.	Neppy.
Slubbiness	Slubby.	A little slubby.	..

3. *Spinning Test Details and Results* :—See Table 15 (b) on page 125.

II. GRADER'S REPORT* FOR TIRUPPUR CAMBODIA.

TIRUPPUR CAMBODIA.									
1933-34.*					1934-35.				
Contract valued under	..	..	..	..	Broach.	July/Aug. Broach.	Broach April/May.	..	1935-36.*
Class	..	..	..	..	Fully good.	Fine.	Fine.	..	..
Colour	..	..	..	..	Creamy.	Creamy-white.	Creamy-white.	..	..
Staple Length	..	..	..	..	31/32 inch.	31/32 inch.	15/16 inch.	..	..
Staple Strength	..	..	..	..	Good.	Very Good.	Good.	..	..
Regularity	..	..	..	..	Good.	Good.	Regular.	..	..
Value above or below contract rate	..	..	..	..	Ra. 60 on.	Ra. 80 on.	Ra. 65 on.	..	..
Basis	..	..	..	..	Ra. 203/July/Aug. Broach.	Ra. 232.	Ra. 203.	..	..
Date of Valuation	..	..	..	..	9-7-34.	9-7-35.	9-4-36.	..	..
Remarks	..	..	..	..	..	..	..	..	..

* The reports for 1933-34 and 1935-36 are compiled by the mill supplying the sample.

Table 15 (b).—SPINNING TEST RESULTS FOR TIRUPPUR CAMBODIA.

Sample No.	Cotton.	Season.	Date of Spinning	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.						RELATIVE HUMIDITY. (%)			
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss †	Yarn Breakages per 100 spindles	Front Roller Speed R.P.M.	Spindle speed R.P.M.	Draft.	Turns per inch.	- LEA. -			YARN TEST RESULTS. BALISTIC.			Spiralling Room.		Testing Room.		
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.				Evenness Class.	Nodes per yard.	Turns per inch Actual.
2373	Tiruppur Cambodia.	1933-34	9-7-34	20.	10	0.6	12.5	0.2	18.4	5	200	9800	0.25	17.98	19.6	85.0	1678	20.0	123.8	2476	3	3.8	17.0	86	75
2374	Tiruppur Cambodia.	1933-34	10-7-34	24	..	..	..	..	..	4	170	9600	5.54	10.73	24.3	66.3	1011	24.9	101.6	2330	4	3.2	18.7	87	79
2375	Tiruppur Cambodia.	1933-34	10-7-34	30	..	..	..	..	..	30	160	9600	6.70	21.80	29.3	49.0	1453	30.1	80.0	2420	5	3.5	20.8	87	78
2745	Tiruppur Cambodia.	1934-35	13-6-35	20	10	0.7	14.9	0.4	20.9	20	108	9800	6.10	17.98	21.2	80.3	1702	21.3	122.2	2603	4	4.2	17.3	90	82
2745	Tiruppur Cambodia.	1944-45	15-6-35	24	..	..	..	..	..	11	182	9800	5.53	19.73	24.1	70.2	1002	23.9	113.2	2705	4	5.0	19.0	80	80
2745	Tiruppur Cambodia.	1944-45	15-6-35	30	..	..	..	..	..	13	166	9800	6.94	21.86	29.6	52.7	1500	30.0	90.8	2724	5	5.2	21.2	90	80
2745	Tiruppur Cambodia.	1944-45	15-6-35	30	..	..	..	..	..	7	162	9600	6.80	21.86	29.3	52.2	1350	29.0	93.4	2703	5	4.5	21.5	89	72
2745	Tiruppur Cambodia.	1944-45	15-6-35	30	..	..	..	..	..	18	174	9360	5.55	19.73	24.7	68.4	1689	24.8	113.0	2902	4	4.5	19.1	89	72
2745	Tiruppur Cambodia.	1944-45	15-6-35	30	..	..	..	..	..	10	134	9300	6.07	17.98	20.2	89.0	1798	19.8	147.6	2922	3	4.2	17.4	80	72

16.—HUBLI KUMPTA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs.)	Sample No.	Cotton.	Season.	Weight (lbs.)
1020	Hubli Kumpta	1930-31	12	2229	Hubli Kumpta	1933-34	11
1332	"	1931-32	12	2692	"	1934-35	11
1742	"	1932-33	12	3160	"	1935-36	11

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1934-35 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

HUBLI KUMPTA.						
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white.	Dullish creamy-white.	White to creamy-white.	Dullish-White to creamy-white.	White to creamy-white.	White to creamy-white.
Cleanliness	Slightly stained, leafy.	..	Dull; leafy.	Leafy (fine leaf).	Leafy.	Leafy.
Feel	Good.	..	Good.	Good.	Good.	Good.
Ginning and Neppi-ness.	Well-ginned.	Somewhat knotted.	Fairly well-ginned.	Well-ginned.	Well-ginned.	Fairly well-ginned.
Seeds .. ..	..	0.3% ginned and unginned besides undeveloped seeds.	..	..	..	..
Card Sliver	Fairly clean.	A little leafy.	Almost clean.	Clean.	Clean.	Almost clean.
Card Web	Good.	Good.	Good.	Even; neppy.	Good.	Good.
Weight of 10 flat strips.	10.7 grams.	14.7 grams.	13.0 grams.	14.7 grams.	13.1 grams.	11.6 grams.
Remarks	Fully pressed.	..	..	..	..	..

(b) *Yarn* :—

HUBLI KUMPTA.						
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Almost clean.	Clean.	Almost clean.	Clean.	Clean.
Evenness	Even.	Even.	Fairly even.	Even.	Fairly even.	Even.
Neppiness	Practically nep-free.	Nep-free.	Free of nep.	Practically nep-free.	Almost free of nep.	Almost free of nep.
Slubbiness .. ..	..	..	..	..	..	..
Remarks .. ..	..	..	..	..	..	..

Spinning Test Details and Results.—See Table 16 on page 128.

II. GRADER'S REPORT* FOR HUBLI KUMPTA COTTON.

		HUBLI KUMPTA.					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Kumpta.	Broach Kumpta.	F. G. M. G. Broach.	F. G. M. G. Broach.	F. G. M. G. Broach.	F. G. M. G. Broach
Class	.. ..	Fully good.	Fully good.	Fully good.	Fully good.	Strict fully good.	Fully good.
Colour	.. ..	Slight tango.	Slight cream.	Brownish-white.	Brownish-white.	Rich Brownish white.	Whitish brown.
Staple Length	.. ..	16/16".	20/32".	7/8".	7/8"	20/32".	3".
" Strength	.. ..	Fair.	Fair.	Fair.	Fair.	Good.	Poor.
Regularity	.. ..	Fair.	Fair.	Regular.	Regular.	Regular.	Irregular.
Value above or below contract rate	.. ..	Pass.	Rs. 30 on.	Rs. 22 on.	Rs. 30 on.	Rs. 60 to Rs. 65 above.	Rs. 30 above.
Basis	.. ..	Rs. 250.	Rs. 106.	Rs. 177.	Rs. 105.	Rs. 245.	Rs. 200.
Date of Valuation	.. ..	15-4-31.	10-5-32.	18-4-33.	9-4-34.	6-3-35.	20-4-36.
Remarks	.. ..	..	..	..	..	..	..

* Report since 1933-34 is made by the Mill supplying the sample.

Table 16.—SPINNING TEST RESULTS FOR HUBLI KUMPTA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.						TEMPERATURE. (°F.).	RELATIVE HUMIDITY. (%)					
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R. P. M.	Spindle speed, R. P. M.	Draft.	Turns per Inch.	Counts Actual.	Strength (lbs.).	Count-Strength Product.	Work of Rupture (inch-lb.).	Count-Work Product.			Evenness Class.	Reps per yard.	Turns per Inch Actual.	Spiraling Room.	Spiraling Specimen.
1020	Hubli Kumpta.	1930-31	10-4-31	20	10	11.9	8.2	0.6	10.6	10	190	9700	6.49	17.98	19.3	84.5	1646	117.0	2305	3	1.7	17.1	87	64	68	
1050	Hubli Kumpta.	1930-31	11-4-31	24		..	..	..	..	16	180	9700	5.81	19.73	23.3	66.9	1530	100.1	2359	4	2.0	18.9	89	62	68
1050	Hubli Kumpta.	1930-31	11-4-31	30		..	..	..	..	30	161	9700	7.30	23.11	30.2	46.8	1413	88.6	2461	5	1.5	22.0	88	66	60
1332	Hubli Kumpta.	1931-32	11-5-32	20	10	14.1	8.6	0.6	21.9	55	189	9200	5.83	17.88	20.4	66.8	1363	110.6	2301	3	0.8	17.4	89	67	68	
1332	Hubli Kumpta.	1931-32	12-5-32	24		..	..	..	..	36	173	9300	5.05	19.73	24.0	56.0	1341	95.0	2314	3	1.0	19.0	89	66	66
1332	Hubli Kumpta.	1931-32	12-5-32	30		..	..	..	..	40	136	8950	7.14	23.11	29.5	41.4	1221	77.2	2324	5	1.2	22.3	90	67	67
1742	Hubli Kumpta.	1932-33	22-4-33	24	10	12.3	8.7	0.6	20.5	75	172	9350	5.87	19.73	23.7	39.4	1408	98.4	2303	4	0.8	19.2	89	65	66	
1742	Hubli Kumpta.	1932-33	24-4-33	30		..	..	..	..	70	138	8850	7.34	23.11	30.1	40.9	1231	70.6	2306	5	1.5	22.2	89	63	68
2229	Hubli Kumpta.	1933-34	13-4-34	20	10	11.1	9.4	0.4	10.8	31	189	9200	5.81	17.88	20.0	85.4	1708	123.0	2472	3	1.2	17.3	88	67	70	
2229	Hubli Kumpta.	1933-34	14-4-34	24		..	..	..	..	95	170	9100	5.70	19.73	24.0	61.9	1556	102.0	2493	4	1.0	19.1	87	69	68
2229	Hubli Kumpta.	1933-34	16-4-34	30		..	..	..	..	43	150	9300	7.14	23.11	30.0	48.8	1464	84.0	2495	5	1.2	22.3	87	67	69
2692	Hubli Kumpta.	1934-35	11-3-35	20	10	11.1	7.7	0.3	18.2	10	193	9300	6.10	17.98	20.4	66.0	1671	131.8	2702	3	1.2	17.3	81	66	68	
2692	Hubli Kumpta.	1934-35	12-3-35	24		..	..	..	..	4	188	10250	5.52	19.73	24.1	77.1	1638	110.4	2683	4	1.0	18.9	82	67	68
2692	Hubli Kumpta.	1934-35	12-3-35	30		..	..	..	..	7	162	10200	6.92	23.11	30.3	56.3	1717	89.4	2762	5	1.5	22.3	81	65	66
3160	Hubli Kumpta.	1935-36	27-4-36	20	10	9.9	7.3	0.2	16.7	10	192	9450	6.10	17.98	19.8	83.6	1603	114.4	2337	3	1.2	17.2	87	66	72	
3160	Hubli 7 n. 45.	1935-36	28-4-36	24		..	..	..	..	14	176	9000	5.43	19.73	24.0	64.6	1550	100.2	2305	4	1.5	18.9	87	65	71
3160	Hubli Kumpta.	1935-36	29-4-36	30		..	..	..	..	17	150	9600	6.71	23.26	29.9	32.5	1317	84.1	2481	4	1.2	22.2	87	65	70

* Diameter of ring frame front roller: 1". Diameter of rings: 1 1/4".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

17.—HUBLI UPLAND COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs.)	Sample No.	Cotton.	Season.	Weight (lbs.)
1021	Hubli Upland	1930-31	12	2230	Hubli Upland	1933-34	11
1333	"	1931-32	12	2763	"	1934-35	11
1743	"	1932-33	12	3161	"	1935-36	11

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive-arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

HUBLI UPLAND.						
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white; slightly bright.	Creamy-white.	White to creamy-white; fairly bright.	Creamy-white.	White to creamy-white.	Creamy-white.
Cleanliness ..	A little leafy.	Fairly leafy.	A little leafy.	A little leafy.	A little leafy.	Leafy.
Feel	Good softish.	Softish.	Good.	Poorish soft.	Good.	Softish.
Ginning and Neppiness	Knotted due to ginning.	A good deal knotted.	Nepped and knotted.	Well-ginned.	Somewhat knotted.	Somewhat knotted in ginning.
Seeds .. ..	..	A few undeveloped besides 0.9% partly ginned and clean seeds.	..	..	..	..
Card Sliver ..	Clean.	Fairly clean.	Almost clean.	Clean.	Clean.	Almost clean.
Card Web ..	A trifle neppy and cloudy.	Good.	A little neppy.	Cloudy.	Somewhat neppy.	Somewhat neppy.
Weight of 10 flat strips	18.3 grams.	18.5 grams.	20.0 grams.	19.0 grams.	31.3 grams.	15.8 grams.
Remarks ..	Fully pressed.	..	..	..	..	..

(b) Yarn :—

HUBLI UPLAND.						
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Fairly clean.	Fairly clean.	Clean.	Clean.	A little leafy.	Almost clean.
Evenness ..	Even.	Fairly even.	Fairly even.	Fairly even.	Fairly even.	Fairly even.
Neppiness ..	Almost nep-free	Almost nep-free	Almost free of nep.	Almost free of nep.	Neppy.	Almost free of nep.
Slubbiness ..	..	..	A trifle slubby.	..	..	..
Remarks ..	..	..	..	..	..	..

3. *Spinning Test Details and Results*.—See Table 17 on page 131.

II. GRADER'S REPORT* FOR HUBLI UPLAND COTTON.

		HUBLI UPLAND.				
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
Contract valued under	..	Kumta.	Broach Kumta.	F. G. M. G. Broach.	F. G. M. G. Broach.	F. G. M. G. Broach.
Class	..	..	Better fully good.	Fine.	Fine.	Fully good to fine.
Colour	..	..	White.	White.	Dull white.	Dull white.
Staple Length	..	..	7/8".	13/16".	3/4".	Barely 3/4".
" Strength	..	..	Poor.	Weak.	Weak.	Weak.
Regularity	..	..	Fair.	Rather irregular.	Rather irregular.	Fairly regular.
Value above or below contract rate	..	..	Rs. 25 on.	Rs. 7 on.	Rs. 20 on.	Rs. 60 on.
Basis	..	..	Rs. 166.	Rs. 177.	Rs. 195.	Rs. 229.
Date of Valuation	..	..	10-5-32.	18-4-33.	9-4-34.	20-4-35.
Remarks	..	..	..	..	..	..

* Report since 1933-34 is made by the Mill supplying the sample.

Table 17.—SPINNING TEST RESULTS FOR HUBLI UPLAND COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FIVE PARTICULARS.*				VERY FINE RESULTS.										LUSTER VALUE (°F.)	RELATIVE HUMIDITY. (%)	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles.	Front Roll. Spindle Speed.	Draft.	Turns per inch.	Counts Actual.	Strength (lbs.)	Count-down with Product.	Counts Actual.	Work of Ringing (lb.-in.)	Count-Work Product.	Evenness Class.	Neps per yard.	Turns per inch Actual.				
1021	Hubli Upland..	1930-31	10-4-31	20	10	9.1	10.1	0.7	18.9	10	106	2700	6.67	17.93	20.0	25.2	1204	12.5	112.2	2102	3	1.2	17.0	97	61	71
1021	Hubli Upland..	1930-31	11-4-31	24						32	116	2700	5.68	19.72	21.1	61.0	1121	22.8	105.0	2231	4	2.2	18.0	89	62	70
1021	Hubli Upland..	1930-31	11-4-31	30						57	161	2700	7.10	21.11	20.2	12.8	1271	23.3	92.0	2102	5	2.7	22.1	88	66	67
1333	Hubli Upland..	1931-32	11-5-32	20	10	11.1	10.2	0.6	20.6	11	146	2900	5.95	17.94	20.2	34.9	1144	29.1	112.0	2221	4	1.5	17.1	89	67	67
1333	Hubli Upland..	1931-32	12-5-32	24						72	173	2900	5.63	19.73	21.5	18.8	1117	24.3	99.1	2215	4	1.2	17.1	89	66	67
1743	Hubli Upland..	1932-33	24-4-33	20	10	10.0	11.3	0.5	20.6	63	143	9120	5.94	17.94	19.9	64.1	1355	19.9	113.0	2219	4	1.8	17.1	86	61	68
1743	Hubli Upland..	1932-33	24-4-33	24						61	173	9100	5.94	19.73	21.8	51.4	1225	24.1	91.6	2250	5	1.2	19.0	87	62	69
2230	Hubli Upland..	1933-34	13-4-34	20	10	7.2	10.8	0.5	17.6	36	159	9200	5.57	17.94	19.7	62.8	1237	19.4	115.5	2273	4	1.5	17.3	88	67	69
2230	Hubli Upland..	1933-34	14-4-34	24						161	179	9100	5.94	19.73	21.0	41.2	1061	24.1	91.0	2265	5	1.5	13.9	87	69	63
2763	Hubli Upland..	1934-35	26-6-35	20	10	8.8	15.3	0.6	23.1	47	190	8750	5.31	17.94	19.4	61.1	1210	19.5	127.6	2143	4	3.2	17.2	88	70	73
2763	Hubli Upland..	1934-35	27-6-35	24						68	169	8900	6.22	20.74	22.7	51.7	1255	23.2	105.6	2150	5	4.0	20.2	88	72	78
1035	Hubli Upland..	1935-36	30-4-36	20	10	9.3	8.7	0.1	17.5	16	105	9350	6.07	17.94	20.1	60.0	1370	19.6	129.0	2470	4	1.0	17.2	88	69	70
1035	Hubli Upland..	1935-36	29-4-36	24						11	175	9300	5.51	19.73	21.7	51.9	1224	23.7	101.2	2373	4	1.5	18.0	87	69	71
1035	Hubli Upland	1935-36	29-4-36	30						20	119	9350	6.39	23.26	20.9	40.9	1210	29.1	91.6	2162	5	1.2	22.2	80	67	69

* Diameter of ring frame front roller—1½". Diameter of frames—15".

* Diameter of ring frame front roller—1". Diameter of rings—11".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

18.—KAMPALA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
2754	Kampala (African)	1934-35.
3266	Kampala (")	1935-36.

I. SPINNING TESTS.

1. Treatment.—

(a) *Blow-room*.—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice). In 1934-35, the sample was not passed through Horizontal cleaner and was passed through the Scutcher three times; otherwise its treatment was the same as for the 1935-36 sample.

(b) *Card-room*.—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3.

2. Spinning Master's Report :—

(a) Cotton :—

	KAMPALA.	
	1934-35.	1935-36.
Colour	White to creamy-white; bright.	White to creamy-white; bright.
Cleanliness	Very clean.	Very clean.
Feel.	Good silky.	Smooth and bodied.
Ginning and Neppiness	Well-ginned.	Somewhat knotted and strung.
Seeds		
Card sliver	Clean and silky.	Clean and silky.
Card web	Even and nep-free.	Good.
Weight of 10 flat strips	22.5 grams.	21.8 grams.
Remarks		

(b) Yarn :—

	KAMPALA.	
	1934-35.	1935-36.
Cleanliness	Clean.	Clean.
Evenness	Even.	Even.
Neppiness	Somewhat nappy—small neps.	A little neppy.
Slubbiness		

Spinning Test Details and Results.—See Table 18 on page 133.

II.—GRADER'S REPORT FOR KAMPALA COTTON.

		KAMPALA									
		1934-35.					1935-36.				
Contract valued under	Broach July/August 1935.	..	..	..	..
Class	Good.	..	..	..	..
Colour	Creamy-white; silky.	..	..	..	..
Staple Length	1½".	..	..	..	..
Staple Strength	Good.	..	..	..	..
Regularity	Regular.	..	..	..	..
Value above or below contract rate	Ra. 129/- on.	..	..	..	..
Basis	Broach July/August 1935.	..	..	..	..
Date of Valuation
Remarks

Table 18.—SPINNING TEST RESULTS FOR KAMPALA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).			
				Weight of Sample (lbs.)	Counts Normal.	Spiraling Loss.		Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.‡	Spindle Speed R.P.M.	Draft.	Turns per inch.	Tens.			BALLISTIC.			Neps per yard.	Turns per inch Actual.		Spiraling Room.	Testing Room.		
						How Room Loss.	Card Room Loss.							Spiraling Loss.	Counts Actual.	Strength (lbs.).	Count-Strain.	Count-Product.	Work of Mopure (inch.-lb.).						Count-Work Product.	
2751	Kampala..	1931-35	27-6-35	20	10	3.1	11.7	0.2	14.6	0	106	9700	5.81	17.98	20.4	110.8	2200	20.4	211.6	4317	3	3.5	17.1	68	70	76
2752	Kampala..	1931-35	1-7-35	30	10	..	..	..	..	3	106	9800	6.41	21.86	28.7	72.4	2078	29.0	126.0	3054	4	4.5	21.1	86	75	82
2753	Kampala..	1931-35	20-6-35	40	10	..	..	..	..	7	141	9800	8.45	25.28	38.8	47.0	1824	38.8	89.0	3453	5	3.8	24.3	88	74	80
2754	Kampala..	1935-36	7-7-36	20	10	2.3	11.1	0.2	13.4	5	201	10300	6.10	17.98	20.3	103.0	2001	20.3	175.6	3017	3	2.5	17.3	87	73	70
2755	Kampala..	1935-36	10-7-36	30	10	..	..	..	..	3	108	10300	6.54	21.86	29.5	66.2	1933	29.4	108.6	3134	4	3.0	21.2	87	72	72
2756	Kampala..	1935-36	11-7-36	40	10	..	..	..	..	5	146	10400	8.89	25.28	40.3	42.4	1709	40.9	74.0	3027	5	3.2	24.7	88	71	68

* Diameter of ring frame front roller—7". Diameter of burs—1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

19.—AFRICAN BUSOGA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1749	African Busoga	1932-33
2755	African Busoga	1934-35
3267	African Busoga	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—1932-33 Sample :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice). The 1934-35 sample was not passed thro' the Horizontal cleaner and was passed through the Scutcher three times ; otherwise its treatment was the same as for the 1935-36 sample.

(b) *Card-room*.—1932-33 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	AFRICAN BUSOGA.		
	1932-33.	1934-35.	1935-36.
Colour	White to creamy-white.	White to creamy-white; bright.	White to creamy-white; brightish.
Cleanliness	Bright ; very clean.	Clean.	Clean.
Feel	Soft silky.	Silky.	Soft silky.
Ginning and neppiness ..	Well-ginned.	Somewhat knotted.	Slightly knotted in ginning.
Seeds .. .. .	.. .. .	.. .. .	.. .. .
Card sliver	Clean.	Clean.	Clean.
Card web	Good.	Fairly neppy.	Somewhat cloudy and neppy.
Weight of 10 flat strips ..	18.2 grams.	30.3 grams.	24.0 grams.
Remarks .. .. .	.. .. .	Card sliver has a poorish soft and silky feel.	Fibres are irregular in length.

(b) Yarn :—

	AFRICAN BUSOGA.		
	1932-33.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.
Evenness	Even.	Even.	Even.
Neppiness	A trifle neppy.	Neppy.	Somewhat neppy.
Slubbiness .. .. .	.. .. .	.. .. .	Occasionally slubby.
Remarks .. .. .	.. .. .	.. .. .	.. .. .

3. Spinning Test Details and Results.—See Table 19 on page 135.

II. GRADER'S REPORT* FOR AFRICAN BUSOGA COTTON.

AFRICAN BUSOGA.									
1932-33.					1934-35.		1935-36.		
Contract valued under					..	F. G. M. G. Branch Hedge Contract No. 2.	Broach July/August 1935.	Broach.	
Class.	Fully good.	Good.	Fine but little staining.	
Colour	Creamy-white.	White creamy.	White.	
Staple Length	1 1/2".	1 1/2".	1 1/2".	
Staple Strength	Very good.	Good.	Very good.	
Regularity	Good.	Regular.	Very regular.	
Value above or below contract rate..	Rs. 118 on.	Rs. 127 on.	Rs. 120 on.	
Basis	F. G. M. G. Branch Contract No. 2.	Broach July/August 1935.	Broach July/August 1936, Rs. 240.	
Date of Valuation	April/May Rs. 182.	..	15-7-36.	
Remarks

* Report since 1932-33 is made by the Mill supplying the sample.

Table 19.—SPINNING TEST RESULTS FOR AFRICAN BUSOGA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.).	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	LEA.			BALISTIC.			Tensile Class.	Keps per yard.	Turns per inch Actual.	Spinning Room.	Testing Room.		
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work (hnd-b.)	Count-W or k Product.							
1740	African Uganda.	1932-33	1-5-33	40	10	4.4	0.3	0.4	13.6	27	141	9700	9.14	25.23	39.1	42.2	1650	39.1	77.6	3034	5	1.8	24.0	83	64	71	
1740	African Busoga.	1932-33	3-5-33	50		..	..	..	..	22	136	10800	11.35	29.90	30.6	29.8	1508	49.8	60.0	2938	5	2.5	23.8	90	67	66
2740	African Busoga.	1934-35	27-6-35	20	10	3.4	14.7	0.4	18.0	16	107	9700	5.93	17.98	20.2	119.2	2108	20.5	209.2	4289	3	8.5	17.1	88	73	78	
2765	African Busoga.	1934-35	28-6-35	30		..	..	..	..	7	164	9700	6.60	21.80	28.8	75.5	2174	29.0	125.4	2749	4	8.0	21.3	88	71	80
2765	African Busoga.	1934-35	28-6-35	40		..	..	..	..	12	143	9800	8.80	25.23	30.6	47.3	1373	40.5	86.4	3109	5	7.5	21.5	88	72	78
3257	African Busoga.	1935-36	8-7-36	20	10	5.6	14.4	0.3	19.4	21	292	10250	5.95	17.98	20.6	102.6	2114	20.4	177.8	3627	3	1.9	17.2	87	73	68	
3267	African Busoga.	1-36	10-7-36	9		..	..	..	..	17	159	10300	6.41	21.80	20.6	70.5	2087	20.7	103.8	3231	4	2.2	20.9	86	72	74
3267	African Busoga.	1-36	9-7-36	4		..	..	..	..	0	149	10400	8.62	25.23	30.9	45.3	1807	39.8	81.2	3232	5	2.8	21.2	87	74	72

* Diameter of ring—1 1/8".
† For loss in blow room, card room, and spinning, for bulk sample spun under mill conditions it would be less than shown here.

20.—JINJA COTTON.

This sample has been tested by arrangement with the Bombay Mill-owners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

<i>Sample No.</i>	<i>Cotton.</i>	<i>Season.</i>
3268	Jinja (African).	1935-36.

I. SPINNING TESTS.

1. *Treatment* :—

- (a) *Blow-room*.—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice).
- (b) *Card-room*.—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3.

2. *Spinning Master's Report.*

(a) *Cotton* :—

	JINJA (AFRICAN).
	1935-36.
Colour.	White to creamy-white ; bright.
Cleanliness.	Fairly clean.
Feel.	Soft smooth.
Ginning and Neppiness.	A good deal knotted in ginning.
Seeds.	..
Card sliver.	Clean, soft and silky.
Card web.	A little neppy and cloudy.
Weight of 10 flat strips.	31.1 grams.
Remarks.	..

(b) *Yarn* :—

	JINJA (AFRICAN).
	1935-36.
Cleanliness.	Clean.
Evenness.	Even.
Neppiness.	Neppy.
Slubbiness.	A little slubby.

3. *Spinning Test Details and Results* :—See Table 20 on page 137.

II.—GRADER'S REPORT FOR JINJA (AFRICAN) COTTON.

	JINJA (AFRICAN).
	1935-36.
Contract valued under.	Broach.
Class.	Fully good to fine.
Colour.	White creamy.
Staple Length.	1 1/4"
Staple strength.	Good.
Regularity.	Regular.
Value above or below Contract rate.	Rs. 110 on.
Basis.	Broach July/August 1936, Rs. 240.
Date of Valuation.	15-7-1936.
Remarks.	..

Table 20.—SPINNING TEST REPORT FOR JINJA (AFRICAN) COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Count of Sample (lb.).	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*					YARN TEST RESULTS.					TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).						
					Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns Per Inch.	LEA.			Counts Actual.	Work (inch-lb.)			Count-Work Product.	Evenness Class.	Keps Per yard.	Turns per Inch Actual.		
														Counts Actual.	Strength (lbs.)	Count-Strength Product.										
3263	Jinja (Ugand.)	1935-36	8-7-36	20	0.2	17.5	0.4	22.0	21	206	10300	6.07	17.08	20.6	98.0	2037	20.7	172.0	3560	3	3.5	17.1	86	70	70	
3264	Jinja (Ugand.)	1935-36	8-7-36	30	..	..	..	..	0	170	10360	6.58	21.86	30.4	66.0	2006	30.1	108.0	3251	4	4.2	20.9	87	73	74
3265	Jinja (Ugand.)	1935-36	9-7-36	40	..	..	..	..	10	147	10450	9.07	25.28	40.5	42.6	1725	40.9	79.0	3250	5	4.0	24.1	80	72	72

* Diameter of ring frame front roller—7". Diameter of rings—1 1/2".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

1.—JAGADIA COTTON.

These samples have been tested by arrangement with the Ahmedabad Millowners' Association, Ahmedabad, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1010	Jagadia	1930-31
1317	Jagadia	1931-32
1550	Jagadia	1932-33

(b) Yarn :— : : : :

		JAGADIA.				
		1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Cleanliness	.. ..	Clean.	Clean.	Clean.	Almost clean.	Clean.
Evenness	.. ..	Even.	Fairly even.	Fairly even.	Even.	Even.
Neppiness	.. ..	Practically free of nep.	Almost free of nep.	Fairly free of nep.	Almost free of nep.	Almost free of nep.
Stubbiness	.. ..	....	....	....	....	....
Remarks	.. ..	....	....	....	....	....

3. *Spinning Test Details and Results.*—See Table 1 on page 140.

II.—GRADER'S REPORT* FOR JAGADIA COTTON.

—		1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Contract valued under
Class
Colour
Staple Length
Staple Strength
Regularity
Value above or below contract rate
Basis
Date of Valuation
Remarks

* Report since 1932-33 is made by the mill supplying the sample.

Table 1.—SPINNING TEST RESULTS FOR JAGADIA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*					YARN TEST RESULTS.					TEMPERATURE ABOVE HUNTER (%).		RELATIVE HUMIDITY (%).				
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed H.P.M.	Spindle Speed H.P.M.	Dm. in.	Turns per inch.	Counts Actual.	Strength (lbs.).	Count Strength Product.	Counts Actual.	Work of Hurdle (inch-lb.).	Count Work Product.	Evenness Class.		Neps per yard.	Turns per inch Actual.	Spinning Room.	Testing Room.
1010	Jagadia.	1930-31	25-4-31	20	8	7.4	8.6	0.5	15.8	25	105	9650	6.93	17.98	20.5	75.0	1550	20.4	113.2	2300	3	1.7	17.1	80	60	68
1010	Jagadia.	1930-31	26-5-31	30A	..	..	..	..	..	64	150	9100	7.08	21.86	30.1	42.3	1273	30.7	76.4	2345	4	1.5	21.1	86	68	65
1010	Jagadia.	1930-31	25-3-31	30B	..	..	..	..	..	28	150	9000	7.29	23.11	30.2	45.0	1377	30.4	78.1	2381	4	2.0	22.0	86	69	67
1317	Jagadia.	1931-32	3-4-32	24	10	8.3	8.4	0.6	16.9	40	178	9650	6.50	19.73	24.7	52.0	1284	24.4	94.0	2294	4	1.2	19.3	88	60	65
1317	Jagadia.	1931-32	4-5-32	30B	..	..	..	..	..	53	152	9700	6.86	23.11	30.1	40.8	1228	30.2	78.8	2380	5	2.2	22.2	90	64	60
1779	Jagadia.	1932-33	24-5-33	24	10	0.4	6.3	0.6	18.3	32	179	9700	5.93	19.73	23.6	65.7	1531	24.0	101.0	2496	4	1.3	18.0	89	60	63
1779	Jagadia.	1932-33	24-5-33	30A	..	..	..	..	..	99	155	9400	6.58	21.86	20.1	47.8	1391	20.0	86.1	2506	5	2.0	21.1	90	68	68
1779	Jagadia.	1932-33	25-5-33	30B	..	..	..	..	..	83	160	9700	6.70	23.11	20.3	18.4	1418	20.5	86.4	2549	5	2.5	22.3	90	60	70
2375	Jagadia.	1933-34	10-7-34	20	10	10.0	11.2	0.5	20.5	36	194	9300	5.95	17.98	20.3	92.6	1271	19.8	112.6	2229	3	1.5	17.1	87	72	76
2375	Jagadia.	1933-34	11-7-34	24A	..	..	..	..	..	86	170	9150	6.10	19.73	24.0	40.4	1186	24.0	91.4	2194	4	1.8	19.0	86	74	78
2375	Jagadia.	1933-34	11-7-34	24B	..	..	..	..	..	73	177	9000	6.10	20.74	24.1	51.3	1236	23.6	94.8	2237	4	1.5	20.0	86	76	75
3164	Jagadia.	1935-36	5-5-36	20	10	5.3	8.1	0.3	13.3	10	193	9650	5.83	17.98	19.9	71.4	1481	20.6	113.6	2340	3	1.0	17.5	88	69	70
3164	Jagadia.	1935-36	4-5-36	24	..	..	..	..	..	18	171	9550	5.33	19.73	23.3	61.3	1428	23.5	101.8	2403	4	1.2	19.1	88	69	70
3164	Jagadia.	1935-36	4-5-36	30	..	..	..	..	..	20	144	8850	6.45	21.80	20.6	41.2	1220	20.8	80.0	2402	4	1.0	20.8	87	68	70

* Diameter of ring frame front roller—1½". Diameter of rings—1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

2.—BAWLA COTTON.

These samples have been tested by arrangement with the Ahmedabad Millowners' Association, Ahmedabad, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton	Season.	Sample No.	Cotton.	Season.
1011	Bawla ..	1930-31	2376	Bawla ..	1933-34

I.—SPINNING TESTS.

1. *Treatment.*—These samples were passed through the Porcupine, Crighton (twice), Hopper, Scutcher (3. times), Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving in Ring Frame No. 1.

2. *Spinning Master's Report* —

(a) *Cotton* :—

	BAWLA.	
	1930-31.	1933-34.
Colour	White; bright.	White to creamy white; bright.
Cleanliness	A trifle leafy.	A little leafy with occasional stains.
Feel	Good.	Good smooth.
Ginning and Neppiness	Very well-ginned.	Well-ginned.
Seeds	1% unginned.	..
Card sliver	Clean.	Almost clean.
Card web	Very good.	Full.
Weight of 10 flat strips	9.9 grams.	19.2 grams.
Remarks .. .. .	..	..

(b) *Yarn* :—

	BAWLA.	
	1930-31.	1933 34.
Cleanliness	Clean.	A little leafy.
Evenness	Even	Even in 20s only.
Neppiness	Almost free of nep.	A little neppy.
Slubbiness .. .. .	..	..

3. *Spinning Test Details and Results* :—See Table 2 on page 142.

II--GRADERS' REPORT FOR BAWLA COTTON.

		BAWLA.									
		1930-31.									
		1933-34.*									
Contract valued under		Broad.									
Class		Fine.									
Colour		White.									
Staple Length		15/16 inch.									
Staple Strength		Fair.									
Regularity		Fair.									
Value above or below contract rate		Rs. 22 on.									
Basis		Rs. 212.									
Date of Valuation		11-5-34.									
Remarks										

* Report for 1933-34 is made by the mill supplying the sample.

Table 2.--SPINNING TEST RESULTS FOR BAWLA COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS. *						YARN TEST RESULTS.										RELATIVE HUMIDITY (%).		
				Counts Nominal.	Weight of Sample lbs.	Flow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed, R.P.M.	Draft.		Turns per inch.	LEA.			BALLISTIC.			Twists per inch Actual.	Spinning Room.			
													Counts Actual.	Strength (lbs.)		Count-Stroke	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.							
1011	Bawla	1930-31	26-3-31	20	8	9.6	8.0	0.8	15.7	23	182	8930	6.41	17.98	20.1	54.8	1101	10.8	103.8	2055	3	1.2	10.0	35	66	67
1011	Bawla	1930-31	27-3-31	21		..	..	..	..	52	102	9300	6.38	20.74	24.7	42.3	1045	24.8	85.0	2108	4	1.7	20.1	86	67	60
2376	Bawla	1933-34	11-7-34	20	10	9.7	9.0	0.4	18.8	10	195	9500	6.00	17.93	20.3	83.3	1601	10.8	136.4	2701	3	2.5	17.4	30	76	77
2376	Bawla	1933-34	12-7-31	30		..	..	..	..	7	160	9500	6.28	21.86	20.4	50.5	1485	20.4	89.0	2599	5	2.8	21.1	30	76	77
2376	Bawla	1933-34	12-7-34	31		..	..	..	..	24	151	9500	7.21	23.20	33.5	39.2	1313	33.1	76.8	2542	0	2.5	23.3	30	77	74

* Diameter of ring frame front roller: 1". Diameter of rings: 1-1/4".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabouts; for bulk sample spun under mill conditions it would be less than shown here.

3.—KADI COTTON

These samples have been tested by arrangement with the Ahmedabad Millowners' Association, Ahmedabad, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1012	Kadi	1930-31
1318	Kadi	1931-32
2377	Kadi	1933-34
3165	Kadi	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow room.*—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once) Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times)

(b) *Card room.*—Upto 1933-34 :—Card, Drawing (2 heads), Sluber, Inter Rover and spun from single hank roving on Ring Frame No. 1.

1935-36 :—As above but spun from single hank roving on Ring Fram No. 3 which is fitted with tape drive arrangement for spindles, whil Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	Kadi.			
	1930-31.	1931-32.	1933-34.	1935-36.
Colour	White; bright	White; bright	Creamy-white	White to creamy-white brightish.
Cleanliness	Leafy	A trifle stained; fairly leafy.	Very leafy with occasional stains.	Leafy.
Feel	Good	Good soft	Good	Good.
Ginning and Neppiness	Very well-ginned	Well-ginned	Well-ginned	Well-ginned.
Seeds	1% unginned	....	....	....
Card Sliver	Clean	Almost clean	Almost clean	Almost clean.
Card Web	Very good	Even and nep-free.	Full	Even and nep-free.
Weight of 10 flat strips .. .. .	....	13.0 grams	20.7 grams	15.3 grams.
Remarks .. .. .	....	....	....	....

(b) Yarn :—

	Kadi:			
	1930-31.	1931-32.	1933-34.	1935-36
Cleanliness	Clean	Clean	Almost clean	Almost clean
Evenness	Even	Fairly-even	Even in the two lower counts.	Even.
Neppiness	Almost free of nep.	Practically free of nep.	Almost free of nep.	Nep-free.
Slubbiness .. .. .	....	....	A trifle slubby.	....

3. *Spinning Test Details and Results* :—See Table 3 on page 144.

Kadi,

Reports for 1933-34 and 1935-36 are made by the mill supplying the sample.

Table 3.—SPINNING TEST RESULTS FOR KADI COTTON.

Reports for 1933-34 and 1935-36 are made by the mill supplying the sample.

• Diameter of ring frame roller—1". Diameter of ring—1 1/4". It is to be noted that the total loss is for a small sample weighing 100 lb., or about 1000 bush; for bulk sample spun under mill conditions it would be less than shown here.

It is to be noted that the total loss is for a small sample weighing 10 lbs., or about 1/10 of a ton; for bulk sample spun under mill conditions it would be less than shown here.